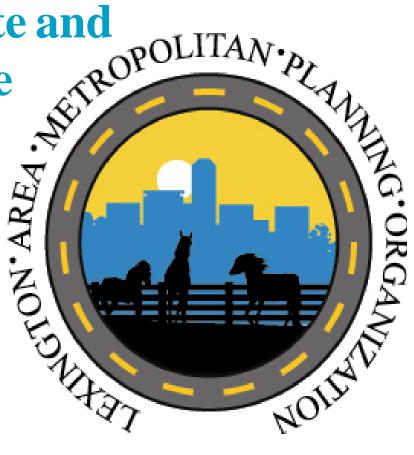
2030 Transportation Plan

for Fayette and

Jessamine

**Counties** 



"Planning for the future while caring for the past."

**June 2004** 

#### **YEAR 2030 TRANSPORTATION PLAN**

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#### **CHAPTER 1**

#### INTRODUCTION

#### PURPOSE OF THE 2030 LONG RANGE TRANSPORTATION PLAN

To meet the challenges and demands of the future, we need to find out what we can reasonably expect in the years ahead so that we can understand what our options are. We can then set reasonable goals and develop effective strategies to achieve them. Many believe it is impossible to predict anything about the future, so it can simply be ignored. This is a serious mistake. It is true, that we can know only a little about the future and it is uncertain, but that small amount is critical in making wise decisions. The public's changing values and priorities, as well as emerging technologies, demographic shifts, economic constraints, and environmental resource concerns, are all parts of the increasingly complex world in which we must lead.

The Year 2030 Long Range Transportation Plan is a description of the Lexington Area Metropolitan Planning Organization's (MPO) plans and investments in the transportation system to meet the future transportation needs within the planning area (currently comprised of both Fayette and Jessamine Counties). It describes both long and short-range choices and decisions reached through an on-going, comprehensive, coordinated, and cooperative transportation planning process.

The Long Range Plan includes descriptions of policies, strategies, programs, and projects necessary to support the growing transportation needs/demands of the area that will lead us to the desirable development of an integrated and intermodal transportation system. The overall purpose for the plan is to help preserve, expand, and operate the area's transportation system to make possible the safe and efficient movement of people and goods now and in the future from 2004 through the year 2030.

Planning ahead does not, of course, guarantee success. Sometimes the unknown future can overcome the most careful planning. But most of the time, success belongs to those who think ahead and not to those who don't. Currently, the long-range transportation plan is updated every three years. This short cycle ensures that a reassessment of plans/choices is based on ever changing conditions. The 2030 Long Range Transportation Plan is consistent (to the maximum extent feasible) with state and other local plans. This plan is a working document to be used to assist and guide in developing and implementing actual transportation improvements and programs. Common issues addressed in this plan include:

- Air Quality and Air Quality Conformity
- Asset management
- Economic Development
- Environmental Justice
- Financial Planning and Programming
- Intelligent Transportation Systems
- Congestion Management & Performance Measures
- Safety
- Public Involvement

Federal and state laws and regulations require the development of the MPO Long Range Plan. As envisioned in this plan, the area's future transportation system will strengthen economic vitality, make travel more safe and secure, provide for better accessibility and mobility, provide for more inter-modal travel, contribute to improving quality of life by meeting local and national environmental goals, promote integration and connectivity of the transportation system, assist with system management and operation, help to preserve the existing transportation system, and help make the distribution of benefits and burdens of plan implementation more equitable among population sectors.

This plan updates and supersedes the Lexington Area Year 2025 Transportation Plan published in 2001 and extends the planning horizon to year 2030. This plan not only reassesses community visions, values, goals, objectives, but

also serves to validate current plans nearing implementation. The 2030 Plan takes into account real and projected changes since the previous transportation plan, including area land use plans/development and associated socioeconomic information such as increased population, employment, and trip making.

#### LEXINGTON AREA MPO TRANSPORTATION PLAN HISTORY

The 1931 Segoe Comprehensive Plan represents the first Fayette County effort to address transportation issues in a comprehensive fashion. This plan included proposals to construct various circumferential facilities between the radially oriented arterial streets. Very few of these proposed circumferential facilities were actually built (e.g., New Circle Road, Man o' War Boulevard) and many were only partially completed. The comprehensive plans that followed usually emphasized this solution, and many traffic problems could still be solved utilizing this method. However, it was not until the mid-60's that a formalized transportation planning process, apart from the comprehensive planning process, emerged in the form of federal legislation.

In 1964, Lexington and Fayette County began a formalized transportation planning process following the 1962 Federal Aid Highway Act. The primary motivation of this act was a desire on the part of the United States Congress to ensure that transportation investments in urbanized areas had a supportive planning process. Areas with populations of 50,000 and over were required to conduct a continuous, coordinated, and comprehensive transportation planning process in order to receive federal financial assistance.

To ensure eligibility for federal funding, the 1964-1990 Transportation Plan was prepared and completed in January 1971, with the assistance of the consulting firm of Wilbur Smith and Associates. One of the major features of this plan was the proposed north-south freeway. Although this proposal could alleviate many of Lexington's traffic problems, anticipated adverse social, economic, and environmental impacts of this plan made the proposal unacceptable to the community. Another key feature of this plan was Man o' War Boulevard, which was completed.

The Year 2000 Transportation Plan, (published in 1984), was a major update of the 1964-1990 Transportation Plan. In 1975, it was determined that this plan was in need of updating due to changes in socioeconomic characteristics, travel behavior, community values, the environment, technology, and the economy. This plan covered the base year of 1975 to a horizon year of 2000. By this time, the city and county governments of Lexington and Fayette County had merged to form the Lexington-Fayette Urban County Government (LFUCG).

The Division of Planning had been designated as the staff to the newly formed Metropolitan Planning Organization (MPO) and the Division endeavored to establish a professional transportation planning staff. The Kentucky Department of Transportation provided travel demand forecasting model support. This arrangement worked reasonably well with proper coordination; however, both organizations later agreed that all future planning efforts and updates should be conducted at the local level, with guidance provided by state and federal government agencies. Following the adoption of the Year 2000 Transportation Plan the local MPO staff has performed the entire travel demand forecasting/modeling process.

The Year 2015 Transportation Plan (published in 1995) was a major update of the Year 2000 Transportation Plan. This plan was completed in accordance with the requirements of (ISTEA) the Intermodal Surface Transportation Efficiency Act of 1991. With this legislation, a plan update was required every three years. Plans were to exhibit conformity with air quality standards and were required to be fiscally balanced. All Travel Demand Forecasting work was done in-house. Air Quality analysis was done by the Kentucky Transportation Cabinet using data from the travel models. To meet ISTEA designated urbanized area requirements, the MPO planning boundary was officially expanded to include all of Fayette and Jessamine Counties on March 23, 1993.

The Transportation Policy Committee and the Transportation Technical Coordinating Committee membership were expanded to include representatives from Jessamine County, and the cities of Nicholasville and Wilmore. Plan priorities were placed in a logical sequence and the plan served well during its short three-year life. However, toward the second year of the plan it became evident that some of the community's priorities had changed and that the next update should address these changes.

#### **CHAPTER 1 – INTRODUCTION**

The *Year 2018 Transportation Plan* was an extension of the previous plan but there were significant differences as well. The most significant differences are listed below:

- 1. Air quality status for the area changed from a "Marginal Non-Attainment Area" for ozone to a "Maintenance Area." Requirements of a maintenance area involve conforming to the SIP or State Implementation Plan emissions budgets for the area as it relates to transportation plans, projects and programs. These requirements are designed to ensure that good air quality is maintained in the MPO air quality areas.
- 2. The Intermodal Surface Transportation Efficiency Act or "ISTEA" was nearing the end of its six-year life just as the long range plan update was coming to a conclusion. Prior to the approval of the *Year 2018 Transportation Plan*, the United States Congress passed Transportation Equity Act for the 21<sup>st</sup> Century (TEA21) which was signed into law by the President. This act guaranteed that all states would receive at least \$0.905 of every gas tax dollar paid to the federal government (after a federal takedown). It was anticipated that this would result in a 60% increase for Kentucky.
- 3. The advent of ISTEA of 1991 vastly expanded transportation planning requirements, increased MPO authority, and introduced more flexibility in the use of capital funds. With ISTEA as a foundation, TEA21 continued the majority of programs contained in ISTEA and in most cases provided greater funding.
- 4. The entire Travel Demand Forecasting Model process is the responsibility of the MPO staff. Currently, the MPO utilizes this sophisticated technical process as the sole source of forecast and travel demand data within the MPO area. However, with air quality requirements playing a major role in MPO analysis efforts, the ability to conduct air quality analysis in-house became more important. Travel model output for the *Year 2018 Transportation Plan* was sent to the state for air quality analysis.

The Year 2025 Long Range Transportation Plan placed greater emphasis upon multimodal and multi-technological approaches to meet travel demands through programs that increase the use of mass transit, bicycles, pedestrian facilities, ridesharing, vanpooling, congestion and incident management techniques, and Intelligent Vehicle Highway Systems. Major goals were to achieve an environmentally sound, financially achievable balance between travel supply and demand. These approaches will continue to shape all future updates of the MPO's long-range transportation plan.

This 2030 Long Range Transportation Plan is an extension of what was begun during previous updates, with a much better understanding of the difficulties encountered when implementing transportation plans, projects, and programs. The increased funding brought about by TEA-21 created its own set of opportunities and obstacles. With the *Year 2018 Transportation Plan*, the staff realized that scheduling more projects placed greater demands on all involved agencies. It became clear that new and better interagency coordination was needed more than ever before.

The MPO staff and the Kentucky Transportation Cabinet worked closely together to refine the estimate of funds likely to be available to the MPO area during the period of time covered by the plan. During *Year 2025 Transportation Plan* development, the staff initially identified future needs without the restraint of a budget. Projects were picked from the list based upon if they could be funded within the time frame of the plan and with the funding estimated to be available. Projects that could not be funded were placed in a prioritized "Unfunded Needs List." Both committed, planned, and unscheduled/unfunded projects are identified in this plan document. This process is continued in the 2030 Plan.

Also, this plan gives more emphasis to non-automobile travel than previous plans. Efforts are continually being made to support growth in ridesharing, vanpooling, bicycling, and pedestrian programs and projects. While it is important to support growth in alternative forms of transportation and Intelligent Transportation Systems, a balance will still have to be maintained between these modes of transportation and the automobile, which will remain the predominant method of transport for the foreseeable future.

#### **CHAPTER 1 – INTRODUCTION**

Several newer automobile technologies and renewable fuel sources have been developed and are ready for use at this time. To date, 26 Hybrid Electric Cars have been added to the local government fleet by successful applications for Congestion Mitigation/Air Quality (CMAQ) grants that supplied funding for additional cost. This success has led to an application to add five more hybrid vehicles to the LFUCG fleet. These efforts have made the Lexington area the third largest hybrid electric fleet in the United States. These technologies enable us to reduce our dependence on fossil fuels and improve air quality. The MPO will continue to promote this and other pollution reducing technologies.

Since one of the bottlenecks of the process had previously been in the area of air quality analysis, a new Air Quality Planner was added to the MPO staff. This planner has the ability to conduct a wide variety of in-house air quality technical analyses. This has made a significant improvement to the overall technical capability of the MPO.

On February 27, 2001, the United States Supreme Court ruled that the EPA could impose the more stringent 8-Hour Air Quality Standards. This is likely to change the attainment status of this MPO and many others throughout the nation. Regardless of this decision, these standards are not likely to be imposed immediately and should not affect the air quality status of this plan. Air Quality Planning efforts are detailed in the Air Quality chapter.

#### METROPOLITAN PLANNING AREA

TEA-21 requirements state that the Metropolitan Study Area must include the entire Census Urbanized Area and areas likely to be urbanized within the next twenty years. Furthermore, counties within the Metropolitan Statistical Area may join the MPO. The MPO area must also include all counties in the air quality "non-attainment" or "maintenance" area unless they are excluded by other agreements.

The 1990 Census determined that portions of Jessamine County were included in the Lexington Census Urbanized Area and the Kentucky Transportation Cabinet recommended that the City of Nicholasville be brought into the study area. The MPO staff determined that if the boundary was to be moved that far, it would be more efficient to include the entirety of Fayette and Jessamine Counties, which explains the inclusion of the City of Wilmore.

In contrast to the MPO transportation planning area (made up of Fayette & Jessamine Counties, see Figure 1.1), Scott and Fayette Counties make up the air quality district for the area (see Figure 1.2). The district is currently designated a "maintenance area" for air quality conformity purposes. Air Quality analyses for the two-county MPO area has been a joint effort between the KYTC and the MPO.

Given the regional nature of transportation, there is agreement that it is vital to have a regional perspective in the transportation planning process. Although the MPO has coordinated extensively with most all agencies responsible for transportation planning in the surrounding counties, discussions for expanding the MPO area to include additional surrounding counties into the MPO have been on-going for many years. While this could enhance regional considerations and decision-making, it would also obligate the MSA counties to make financial contributions to the operation of the MPO.

Although this type of expansion would benefit regional planning efforts, it may not improve the capital construction outlook, since the KYTC has stated that the Surface Transportation Program - Lexington (SLX) funding allocation to the area would not change. This would result in more counties competing for the same small pot of SLX funds, which would not be a beneficial situation. However, the possibility of using an additional portion of statewide funds to support the proposed expansion of the MPO has been discussed.

Figure 1.1

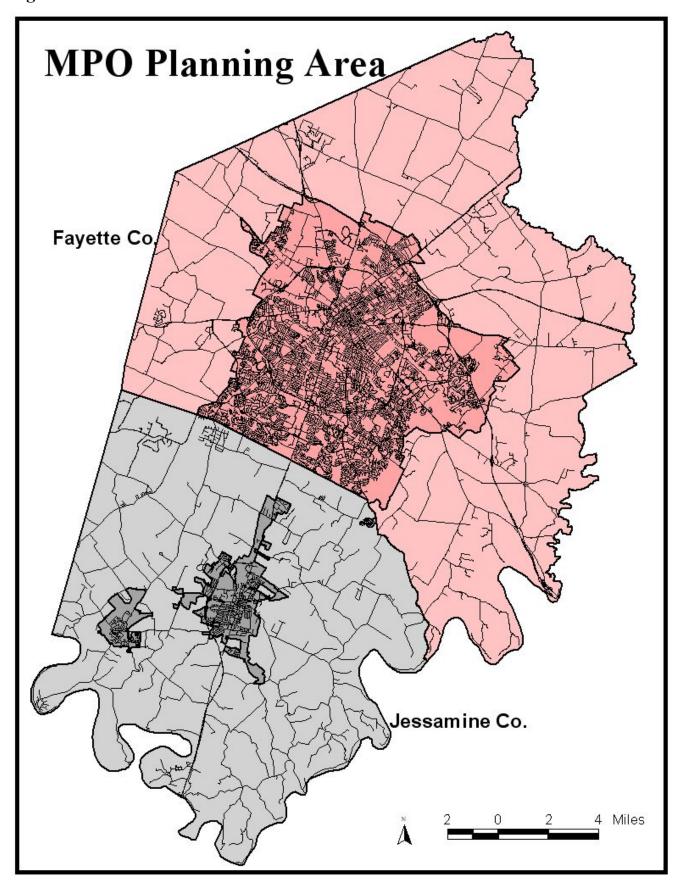
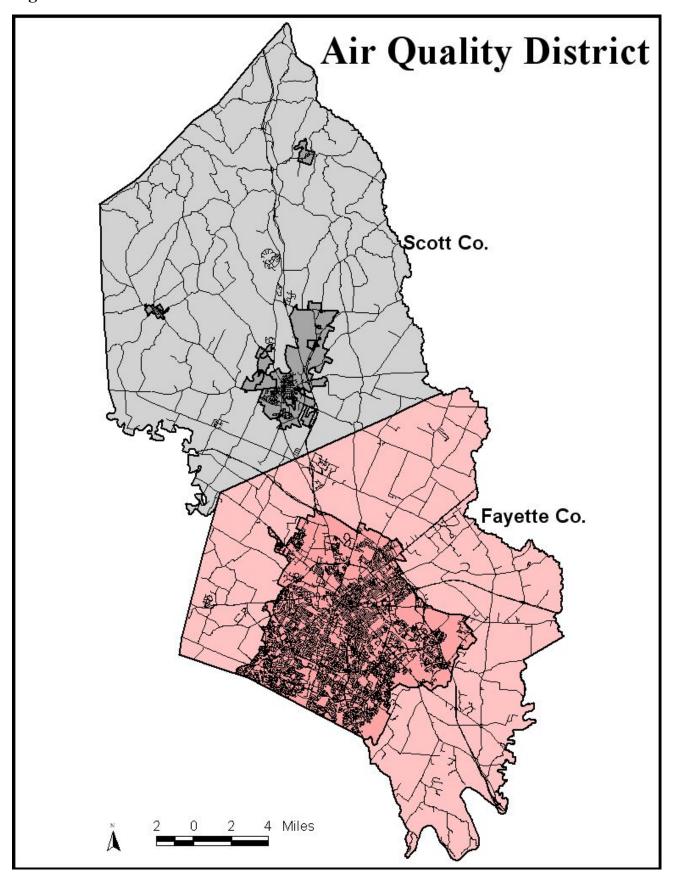


Figure 1.2



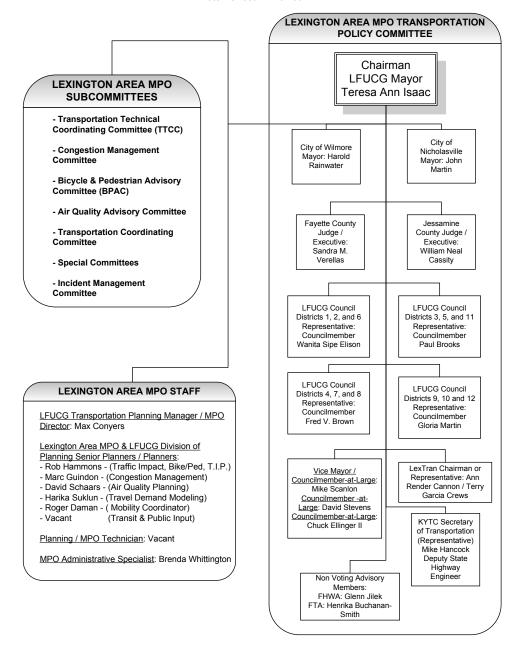
#### METROPOLITAN PLANNING ORGANIZATIONAL FRAMEWORK

The basic structure and committee organization of the MPO has not changed significantly since 1974 when the committee structure was established by a letter from Mayor H. Foster Pettit to the Kentucky Secretary of Transportation, Calvin Grayson. The committee structure (see Figure 1.3) was established shortly after the city of Lexington and Fayette County merged to form the Lexington-Fayette Urban County Government, a logical base upon which to establish the MPO. The Citizen's Transportation Commission, originally a part of the MPO committee structure, is no longer active, as it became apparent during the late 1970's that better public input for the planning process could be achieved via public hearings and public meetings.

Figure 1.3

# LEXINGTON AREA METROPOLITAN PLANNING ORGANIZATION (MPO) ORGANIZATIONAL STRUCTURE

Date Revised - 4/23/2004



#### **MEMBERSHIP COMPOSITION**

#### Transportation Policy Committee (TPC)

As established in 1974, the Policy Committee was composed of the Lexington-Fayette Urban County Government Mayor, the Urban County Council, the County Judge Executive, and the Kentucky Secretary of Transportation. With the expansion of the Metropolitan Study Area came an expansion of the MPO committee membership. The Policy Committee added the Jessamine County Judge Executive, the Mayor of Nicholasville, the Mayor of Wilmore, and the Chairperson of the Lexington Transit Authority Board, for a total of twenty-two members. This membership was roughly representative of the ratio between population represented and the existing committee membership.

Responding to suggestions to reduce the committee size, and in an effort to improve regional cooperation between Fayette County and Jessamine County, the MPO Certification Review in January 2002 recommended that changes be made to the TPC structure. In 2003, the TPC voted to establish a new committee structure, beginning in FY 2004. The TPC now includes the Mayors of Lexington-Fayette County, Nicholasville and Wilmore, the Judge-Executives of both counties, the three at-large members of the Urban County Council, four Councilmembers, each representing three Fayette County council districts, the Kentucky Secretary of Transportation, and the Chairperson of the Lexington Transit Authority Board, for a total of fourteen members. To further enhance regional cooperation, meetings will be rotated between the two counties.

#### Transportation Technical Coordinating Committee (TTCC)

The Technical Committee is composed of persons with specialized training, knowledge and experience in various areas of transportation, who review the technical and design aspects of proposed projects, programs, plans, and policies and make recommendations for approval or disapproval to the Policy Committee. This committee has several subcommittees, such as those listed below, which are formed on an as-needed basis to address specific tasks and/or problems.

#### Subcommittees of the TTCC 1

- 1. Transportation Improvement Program (TIP) Committee
- 2. Congestion Management Committee
- 3. Incident Management Committee
- 4. Air Quality Advisory Committee
- 5. Bicycle/Pedestrian Advisory Committee
- 6. Transportation Coordinating Committee
- 7. Other special committees formed as needed

#### **Other Committees**

The MPO staff has been active with many local and regional committees and efforts that provide input to the transportation planning process. Some of these committees were originally established in response to the LFUCG Comprehensive Plan update while others were established to address/develop projects or focus on issues. The committees/organizations listed on the following page were established since or during the last plan to deal with many of the more difficult issues that must be addressed within our area in the near future.

<sup>&</sup>lt;sup>1</sup> Current membership listings may be found in Appendix 2 - MPO Committee Membership Lists.

- 1. **Newtown Pike Extension Advisory Committee (NPECAC)** This committee was established for the Newtown Pike Extension Project. Its purpose is to assist with gathering public input, provide advisory direction to the design consultants and provide consensus regarding the final design plans and the small area plan for this important project.
- 2. **Northeast Jessamine County Transportation Study Work Group** Similar to the Newtown Pike Extension Committee, this committee (or work group) was formed to guide and assist consultants and provide consensus regarding existing and future issues and how to plan to deal with these issues for Northeast Jessamine County.
- 3. **Jessamine County Transportation Task Force** This group was formed in early 2002 to help to address transportation issues in the cities of Nicholasville and Wilmore and Jessamine County. The Lexington Area MPO has found this group very valuable in guiding and developing regional transportation plans and programs.
- 4. **Downtown Revitalization Initiative** Transportation Planning staff provided input to this committee, which was active during 2000. Consensus was achieved among Transportation Task Force members that the Newtown Pike Extension project is an extremely important part of any scenario for the downtown area. It would draw traffic out of the downtown having no destination in the downtown. There have been several proposals to return some of the downtown streets from one-way operation to two-way operation. The central idea is to make the downtown a more accessible, more pedestrian friendly area with a greater sense of place.
- 5. **Lexington Traffic Congestion Task Force** This committee was appointed by the Mayor in 2002 to focus on traffic congestion within the Lexington urban area and recommend the most efficient ways to alleviate it. The result of this committee's work was a published report of findings and recommendations.
- 6. **US 68 Harrodsburg-Lexington Road, Transportation Advisory Committee** The mission of the Transportation Advisory Committee is to present the views and concerns of officials and citizens within the project area in order to achieve a safe and efficient transportation system, with the least amount of disturbance to the character of the surrounding area, meet safety requirements and serve the needs of all who travel this route. The committee has assisted the Kentucky Transportation Cabinet in setting "goals and objectives" for proposed highway improvements to U.S. 68 in Jessamine County from KY 29 at Wilmore to just south of Southland Christian Church. The MPO staff has provided essential professional input and technical expertise.
- 7. Bluegrass Corridor Management Planning Handbook, Technical Advisory Committee The purpose of the committee was to serve as a guide for community leaders, planners, and transportation officials in the development of corridor plans that are comprehensive and responsive to community values, Kentucky's heritage, mobility and accessibility. Sponsored by Bluegrass Tomorrow, the committee was composed of planners, local business owners, transportation specialists, concerned citizens, and local, state, and federal officials to set the tone of the handbook before any words were put on paper. The handbook has been widely distributed.
- 8. **Transportation Advisory Committee of the Bluegrass Area Development District** The staff participates in this committee which is charged with reviewing federal and state transportation programs in the seventeen county region and making recommendations to the state.
- 9. **Fayette Mall Road Design Study Advisory Committee** The staff participated in this committee which is trying to determine the feasibility of constructing a new road in the vicinity of Fayette Mall, parallel to Nicholasville Road. The study seeks to determine what type of impact a new road would have on relieving traffic congestion on Nicholasville Road, Reynolds Road, and Man o' War Boulevard, the feasibility of such a road, and where it should be located.

#### TRANSPORTATION PLANNING PROCESS

The Lexington Area MPO has been involved with transportation planning since being established in 1974. It is responsible, in cooperation with the Kentucky Transportation Cabinet, for planning and coordinating all aspects of transportation planning on behalf of local governments within its region. The MPO's transportation planning responsibilities are defined under the Federal Aid Highway Act of 1962. This includes maintaining an updated long-range transportation plan for the region, prioritizing transportation improvements for federal funding (by preparation of the Transportation Improvement Program or TIP), and providing a variety of data management, technical studies and special services that support regional planning efforts or assist local governments.

The Clean Air Act Amendments (CAAA) and the Intermodal Surface Transportation Efficiency Act enacted in 1990 and 1991 respectively modified planning responsibilities. Both the long-range transportation plan and the Transportation Improvement Program (TIP) are required to address air quality. Emphasis shifted away from expanding the system capacity toward providing a more balanced, efficient and cost-effective transportation system.

The primary purpose of the long-range transportation plan continues to be to define the future transportation system. This future vision is defined by travel demand forecasts to the future year 2030 and interim years. The first four years of the long-range transportation plan prioritizes needed capital projects into an implementation schedule of projects and programs that are consistent with the four-year schedule of projects and programs in the Transportation Improvement Program (TIP).

The TIP is a compilation of all "prioritized" transportation projects and programs assisted by public funding (e.g., highway, transit, bicycle, etc.) and "constrained" to estimated available funding levels. It is the region's short-range program for implementing transportation improvements and the mechanism by which local governments rank system improvements for federal funding. Upon adoption by the Transportation Policy Committee, the TIP becomes a policy document, directing the flow of transportation improvements in the region. Transportation improvements must be included in the TIP as a prerequisite for federal funding assistance. In addition, the TIP is updated every year and amended more often when necessary, and the long-range transportation plan is updated every three years in accordance with federal requirements.

Additional responsibilities of the MPO include providing technical assistance to local governments, coordination with state transportation agencies, maintaining data needed for transportation planning, maintaining a "Congestion Management System" (CMS), and developing mobile source information for air quality analysis.

#### PUBLIC INVOLVEMENT

Public involvement is an emphasis throughout all elements of this plan update to help develop and communicate the area's vision and goals, provide opportunity to address a variety of transportation issues, and receive valuable input into the planning process. The MPO public involvement process works to inform, educate and outreach to the public to the maximum extent possible.

Talking and interacting with the community through outreach and involvement, enables staff to gain valuable knowledge, insight, and feedback that help with the development of MPO and local/regional plans. In addition to public meetings, the MPO has used creative techniques to enhance participation/input, outreach, and coordination in the transportation planning process. The end result has been the formation of a strong unified vision of how the region's transportation system should evolve from the present into the future.

The Lexington Area MPO Public involvement process and efforts are detailed in the "Lexington Area MPO Public Participation Plan". This plan is reviewed and updated annually to continually make this process more effective and better overall. Also, public comments received during public meetings held for this plan update process are detailed in Appendix 3.

#### **CHAPTER 2**

#### PLANNING FRAMEWORK

Federal legislation provides the guiding framework that governs the transportation planning process for all MPO's. As previously mentioned in Chapter 1, the Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21) and the Clean Air Act Amendments of 1990 (CAAA) work in concert to provide this framework and are further augmented with the National Environmental Policy Act (NEPA) and the Americans with Disabilities Act (ADA).

Other contributing factors to the framework are the mechanisms for intergovernmental coordination, the region's existing transportation system, demographic and economic characteristics, and planning factors representing a variety of concerns. All of these other factors will be discussed either later in this chapter or in other chapters.

#### LEGISLATIVE OVERVIEW

The Year 2030 Long Range Transportation Plan is a response to several legislative directives. As an update of the regional long-range transportation plan, it responds to requirements in the Federal Aid Highway Act of 1962, the Clean Air Act Amendment (CAAA) and Transportation Equity Act for the 21<sup>st</sup> Century or TEA-21. TEA-21 is the legislation that the MPO is currently under. It has been extended until a reauthorization can be worked out. These legislative acts together with the forthcoming reauthorization of TEA-21 expand the role of transportation planning to one of supporting the economy, improving safety and mobility, protecting the environment (air quality), enhancing integration and connectivity, promoting efficiency and system management, and preserving the existing transportation system. The plan's scope is further expanded by the National Environment Policy Act (NEPA), which contains provisions for reducing fuel consumption, and the American with Disabilities Act (ADA) of 1990, which requires public transit to be accessible to persons with disabilities.

All of this legislation attempts to deal with new problems or redress the failures of previous legislation. The original Federal Aid Highway Act was enacted during construction of the interstate system, which brought unprecedented mobility, but also made apparent the need for greater intergovernmental coordination of land use and transportation planning.

As the interstate system and federal highway funding assistance programs enhanced the opportunity for highway travel, automobile use and reliance increased dramatically. More auto travel resulted in more air pollution, which contributed to the general deterioration of air quality in many metropolitan areas. Legislation to restore air quality to national health-based standards had failed in many areas, partly due to continuing increases in automobile travel.

The most recent legislative attempt to attain better air quality took the form of the CAAA of 1990, which addresses transportation's adverse impacts on air quality in addition to provisions for reducing pollution from other sources. This act has become a significant driving force by transforming transportation planning into a process for improving air quality as well as mobility. It presents a significant challenge to transportation officials to find ways of reducing auto emissions by reducing "Single Occupant Vehicle" (SOV) travel. The region's transportation plans, programs, and projects must conform to State Implementation Plans (SIP budgets) for air quality.

The enactment of ISTEA in 1991 and subsequent enactment of TEA-21 strengthened the CAAA's ability to meet its objectives by ensuring that improvements in air quality will not be reversed by growth in travel. The ISTEA gave state and local officials tools for adapting the transportation system to meet CAAA requirements; including increased funding, greater flexibility in the use of funds (e.g., transit, bicycle), and new metropolitan and statewide planning requirements. TEA-21 continues to reinforce this relationship.

TEA-21 continues to encourage changes: 1) improving mobility with alternatives to automobile travel, and 2) changing attitudes of individuals who rely upon cars for mobility. These changes create a need to explore transportation demand management strategies in addition to options for enhancing travel opportunities.

All of this legislation links the nation's environmental, social, energy and mobility goals in a way that will ultimately result in a more multimodal transportation system. People will have more of an opportunity to travel by means other than the automobile, to breathe cleaner air, and to spend less income for travel. Change is never easy, but this plan represents the means by which to achieve these goals.

#### TRANSPORTATION EQUITY ACT for the 21st CENTURY (TEA-21)

Continuing in the direction set out by the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), TEA-21 builds on the initiatives established by the last major authorizing legislation for surface transportation. This new Act combines the continuation and improvement of current programs with new initiatives to meet the challenges of improving safety as traffic continues to increase at record levels, protecting and enhancing communities and the natural environment as we provide transportation, and advancing America's economic growth and competitiveness domestically and internationally through efficient and flexible transportation.

#### **SIGNIFICANT FEATURES OF TEA-21**

- 1. Assurance of a guaranteed level of Federal funds for surface transportation through FY 2003. The annual floor for highway funding is keyed to receipts of the Highway Account of the Highway Trust Fund (HTF). Transit funding is guaranteed at a selected fixed amount. All highway user taxes are extended at the same rates when the legislation was enacted.
- 2. Extension of the Disadvantaged Business Enterprises (DBE) program, providing a flexible national 10 percent goal for the participation of disadvantaged business enterprises, including small firms owned and controlled by women and minorities, in highway and transit contracting undertaken with federal funding.
- 3. Strengthening of safety programs across the Department of Transportation (DOT). New incentive programs, with great potential for savings to life and property, are aimed at increasing the use of safety belts and promoting the enhancement and enforcement of 0.08 percent alcohol concentration standards for drunk driving. These new incentive funds also offer added flexibility to States since the grants can be used for any Title 23 U.S.C. activity.
- 4. Continuation of the proven and effective program structure established for highways and transit under the landmark ISTEA legislation. Flexibility in the use of funds, emphasis on measures to improve the environment, focus on a strong planning process as the foundation of good transportation decisions-all ISTEA hallmarks-are continued and enhanced by TEA-21. New programs such as Border Infrastructure, Transportation Infrastructure Finance and Innovation, and Access to Jobs target special areas of national interest and concern.
- 5. Investing in research and its application to maximize the performance of the transportation system. Special emphasis is placed on deployment of Intelligent Transportation Systems to help improve operations and management of transportation systems and vehicle safety.

#### **MAJOR FUNDING PROGRAMS OF TEA-21**

1. Surface Transportation Program (STP) - STP provides flexible funding for state and local governments to be used for a wide variety of activities. These activities include highway and transit capital projects, carpool projects, bicycle and pedestrian facilities, research and development, planning, highway beautification and other enhancement projects, and safety (\$33.3 billion). 10 percent is set aside for safety construction activities and 10 percent is set aside for transportation enhancements. The local allocation is described, elsewhere in this document, as SLX (Surface Transportation Program for Lexington).

#### **CHAPTER 2 – PLANNING FRAMEWORK**

- 2. National Highway System (NHS) NHS is used to construct and repair interstate highways and major state roads (\$28.6 billion). NHS routes are federally designated routes which are vital to our nation's economy, defense and mobility.
- 3. Interstate Maintenance Program (\$23.8 billion).
- 4. Urbanized Area Formula Grant Program Authorizations totaling \$18.03 billion for the 6-year period are provided for the Urbanized Area Formula Grant Program (Title 49 U.S.C. Section 5307). For urbanized areas with populations of 200,000 or more, the definition of "capital" has been revised to include preventive maintenance. Operation assistance for these larger areas is no longer an eligible expense. Also, for these larger areas, at least 1 percent of the funding apportioned to each area must be used for access, and enhanced access for persons with disabilities.
- 5. Bus Capital Investment Grant A total of \$3.55 billion is authorized for bus and bus- related facilities over the 6-year period.
- 6. Congestion Mitigation and Air Quality (CMAQ) Improvement Program for projects explicitly aimed at helping non-attainment and maintenance areas attain the clean air standards.
- 7. Bridge replacement and rehabilitation (\$20.4 billion).
- 8. Programs to promote new technologies, such as Intelligent Vehicle Highway Systems (IVHS).

Planning continues to be an integral part of TEA-21 as it was with ISTEA. MPOs and state transportation agencies must each compile 20-year transportation plans and also produce a series of transportation improvement programs that include an identification of funding sources and project timing.

TEA-21 carries on the emphasis upon the long-range planning process giving great consideration to land use and to travel demand, congestion management, intermodal connectivity, and methods to enhance transit service and travel by other modes.

TEA-21 continues to reinforce the objectives of the Clean Air Act Amendments. Improved air quality has become a principal objective of the nation's transportation programs. TEA-21 prohibits the use of federal funds for highway projects that will significantly increase SOV capacity in Transportation Management Areas (TMA's: areas over 200,000 population), which are classified as ozone nonattainment areas.

#### THE CLEAN AIR ACT AMENDMENTS

Congress adopted the Clean Air Act Amendments (CAAA) in 1990 to address the nation's major air pollution problems. The CAAA contains several provisions that have far-reaching effects on transportation sources of air pollution. Automobile emissions are the primary source for air pollution within the MPO planning area. While previous clean air legislation has resulted in mixed results, it has succeeded in lowering vehicle emissions per motor vehicle. Partially offsetting this improvement has been the steady increase in motor vehicle travel.

The CAAA requires air quality plans to quantify air pollution reduction needs and to commit to air pollution reduction strategies. Among the CAAA's key provisions for reducing transportation-related pollution are the State Implementation Plan (SIP), transportation control measures (TCM), and conformity provisions for transportation planning. TCMs are currently not indicated for this area, but could become a part of future emission reduction strategies.

The CAAA also makes provisions for maintaining good air quality once it has been achieved. Transportation planning efforts must be directed toward controlling the adverse impacts of increased automobile travel. CAAA and ISTEA both mandated the expansion of the transportation planning process to include protecting air quality as well as providing for future transportation needs. TEA-21 continues the emphasis upon protecting the air quality. The

#### **CHAPTER 2 – PLANNING FRAMEWORK**

region's transportation plan must define local commitments to promote alternatives to automobile travel and to enhance mobility while minimizing highway construction. Air quality has become a key criterion for making decisions in transportation plans, programs, and projects.

Ground level Ozone pollution has been primarily responsible for this region's air quality problems. The past three years of monitoring data for Particulate Matter (PM 2.5) has shown a potential problem with PM 2.5 in Fayette County. Ozone is one of the pollutants for which the EPA has defined national ambient air quality standards (NAAQS). Nitrogen Oxides are a primary component of Ozone. This component is monitored, and the plan must show favorable emission profiles. Based on health impacts, the NAAQS specify allowable pollutant concentrations and exposure limitations.

Ozone, commonly known as smog, is not emitted directly into the atmosphere, but is formed when precursor emissions (volatile organic compounds and oxides of nitrogen) react in the presence of sunlight. As a general rule, nearly half of the volatile organic compounds (VOC's) from man-made sources are from motor vehicles. VOC's are also emitted from industry and area sources (individually insignificant sources, e.g., lawn mowers, consumer solvent use, farm equipment), which have a cumulative impact. Generally speaking, since the Central Bluegrass area has very few heavy (or dirty) industries, it can be assumed that the motor vehicle is the primary culprit.

This area is one of 96 urban areas in the country that initially did not meet ozone standards. The reason for these initial violations may have been due to the unusually dry weather and air inversions in 1988-1989. However, although emissions violations were noted in 1988-1989, there were no further violations, prompting the state to request the US Environmental Protection Agency (EPA) to remove this area from the nonattainment list. In addition, individual automobile emission levels have continued to decrease. In 1995, the state's request was granted. This placed the Lexington Area MPO into the "maintenance" category. The Long Rang Transportation Plan and the Transportation Improvement Program must keep emissions within the bounds of the "emissions budget". The Kentucky Natural Resources and Environmental Protection Cabinet set this budget in 1990.

While the MPO study area consists of Fayette and Jessamine Counties, only Fayette County is a "maintenance" area for ozone, along with Scott County, the adjacent county to the north. The MPO staff coordinates Air quality analysis for Scott and Fayette Counties with the Kentucky Transportation Cabinet (KYTC) and the Kentucky Environmental and Public Protection Cabinet's Division for Air Quality (EPPC). The MPO staff conducts the air quality analysis for Fayette County and the KYTC staff has the air quality analysis responsibilities for Scott County.

#### STATE IMPLEMENTATION PLAN

The state is required to develop a State Implementation Plan (SIP) in cooperation with MPOs, that identify the efforts necessary to attain ambient air quality standards throughout the State. The Kentucky Environmental and Public Protection Cabinet's Division for Air Quality (EPPC) prepare it. Region IV in Atlanta will provide the federal EPA review. Currently, there are no Transportation Control Measures (TCM's) required for this MPO, due to its "maintenance" status. The MPO will assist the state in the development of the SIP as necessary. Failure to submit an adequate SIP or make sufficient progress in implementing its recommendations may result in the application of federal sanctions, such as withholding federal funds normally used to improve highways, which can affect mobile sources.

The CAAA calls for ozone nonattainment areas of the "serious" or worse classifications to implement Transportation Control Measures (TCM). TCM's are measures that alter personal travel patterns, mode choice, or traffic flow to reduce vehicle emissions but do not include technological improvements that make vehicles pollute less. Areas classified as "marginal" or "moderate' may not need to have any TCMs in the SIP especially where technological measures like Inspection and Maintenance programs are underway. Since the Lexington Area MPO is in the "maintenance" category, the SIP requires no TCMs. However, this *Year 2030 Transportation Plan* may include measures that could be classified as TCMs.

#### AIR QUALITY CONFORMITY PROVISIONS

One of the most far-reaching provisions of the CAAA, and one that links air quality and transportation, is that conformity is required among transportation plans and programs, and the SIP. The conformity assessment must show that transportation investment will not worsen air quality.

Conformity is not determined on a project-by-project basis, but on a region-wide basis. MPOs and the U.S. Department of Transportation make a determination of conformity, if transportation plans and programs in non-attainment and maintenance areas meet the purpose of the SIP, which is reducing pollutant emissions to meet the national air quality standards. Only transportation projects that are federally funded or approved must meet the conformity requirements, but all regionally significant projects, including nonfederal funded ones, must be included in the plan and the conformity analysis of the TIP. Conformity determinations, for non attainment and maintenance areas, are to be made no less than every three years or as changes are made to plans, programs, and projects.

#### THE AMERICANS WITH DISABILITIES ACT OF 1990 (ADA)

The Americans with Disabilities Act of 1990 (ADA) mandates equal opportunity in employment, transportation, telecommunications, and places of public accommodations for individuals with disabilities. The ADA will have a significant impact on the services that local transit providers can offer and the way they conduct business. ADA changes many aspects of public disability policy previously established under Section 504 of the Rehabilitation Act of 1973; it requires a much greater level of affirmative action in employment, programs, services, and policies. As a civil rights law, ADA provides both incentives and penalties to strengthen compliance, and is a precondition for federal funding and a way to mitigate legal liability.

A significant portion of Title II of ADA addresses public transportation systems and ensures that those with disabilities have an equal opportunity to use these services. Specific requirements are:

- All newly leased or purchased vehicles on fixed-route service must be accessible.
- Public fixed-route systems must offer comparable paratransit service.
- New facilities must be accessible.
- Alterations to existing facilities must meet accessibility requirements.

Every public entity operating fixed-route transportation (except those providing commuter bus, commuter rail, or intercity rail services) was required to submit a plan and yearly updates detailing how paratransit services would be provided. Total compliance was required as soon as possible, but no later than January 26, 1997. To ensure public participation, persons with disabilities and groups representing them would need to be consulted in all phases of the planning process.

Six criteria have been developed to help define "comparable" paratransit service. The paratransit service must:

- 1. Operate in the same service area as the fixed-route system;
- 2. Have a response time that is comparable to the fixed-route system;
- 3. Have comparable fares (fares charged for complementary paratransit service can be no more than twice the fare on the fixed route system;
- 4. Have comparable days and hours of service;
- 5. Meet requests for any trip purpose (no prioritization for trip purpose is allowed); and
- 6. Not limit service availability because of capacity constraints.

The ADA regulations also establish requirements for several aspects of operation for the complementary paratransit service, and these aspects must be addressed in each of the transit system's ADA plans.

#### INTERGOVERNMENTAL COORDINATION

This plan's development and implementation is highly dependent upon coordination with a number of different agencies at the national, state, regional, and local levels. These organizations are responsible for planning and implementing intermodal transportation projects and programs.

Coordination involves the joint participation by these agencies and organizations within a framework designed to maximize benefits and minimize overlap, duplication, and potential conflict involved in transportation plans, programs, projects and services. This framework is a mutually agreed upon arrangement for achieving shared goals and objectives. However, the actual function of any process depends largely upon the establishment of informal personal relationships.

The following is a partial list of the agencies, organizations, and governmental entities with which the MPO must establish coordination:

- 1. U.S. Department of Transportation
- 2. Federal Highway Administration
- 3. Federal Transit Administration
- 4. U.S. Environmental Protection Agency
- 5. Kentucky Transportation Cabinet
  - Division of Multimodal Programs
  - Division of Planning
  - District 7 Office
- 6. Kentucky Environmental and Public Protection Cabinet's Division for Air Quality (EPPC)
- 7. Lexington-Fayette Urban County Government
- 8. Jessamine County
- 9. Nicholasville, Kentucky
- 10. Wilmore, Kentucky

#### ADOPTED GOALS AND OBJECTIVES FOR THE YEAR 2030 TRANSPORTATION PLAN

#### **Mission Statement:**

To promote a safe, efficient, environmentally sound and fiscally responsible transportation system which enhances the quality of life, promotes sustainable economic growth, and provides equitable travel opportunities among all population sectors in the region, while providing for alternate modes of travel including transit, bicycle, and pedestrian traffic.

Goals and objectives represent a consensus of the community's vision.

#### Goal 1: Promote a safe and secure transportation system.

#### Objectives

- A. Reduce the number and severity of traffic accidents.
- B. Increase the safety and security of the transportation system and its users.
- C. Reduce conflicts between motorized and non-motorized modes of transportation through the use of better facilities buffers and other safety measures.
- D. Maintain and improve the process to identify hazardous locations and to develop and implement safety improvement projects.

#### Goal 2: Provide accessibility and mobility for all people and goods.

#### Objectives

- A. Reduce distance and time spent traveling.
- B. Increase the occupancy rate for all motorized modes.
- C. Reduce barriers to the use of the transportation system.
- D. Increase continuity of transportation service across the region.
- E. Increase mode choices for the movement of goods and people.
- F. Improve the connections between modes of transportation, including transit, bicycle, pedestrian, and other alternative modes.
- G. Improve coordination of transportation planning and implementation activities from a regional perspective.
- H. Encourage efficient land use patterns, allowing accessibility to goods, services, and employment.
- I. Enhance system integration and connectivity.
- J. Ensure mobility and accessibility for the disabled population.

#### Goal 3: Invest in transportation infrastructure to enhance the vitality of the community.

#### Objectives

- A. Preserve and maintain the existing transportation system.
- B. Develop a financially responsible plan that allocates available resources with environmental equity.
- C. Preserve current and planned right-of-ways for transportation system improvements.
- D. Develop transportation services that are consistent with regional and local land use plans as well as other development plans.
- E. Encourage creative public and private partnerships in transportation improvements.
- F. Provide a transportation system that encourages employment growth, sustainable economic productivity and international competitiveness of the region.
- G. Encourage the development of traditional and alternative transportation facilities for commuting purposes and recreational use.

#### Goal 4: Protect and enhance the environment.

#### Objectives

- A. Meet the national ambient air quality standards and to be in air quality conformity with the State of Kentucky Implementation Plan.
- B. Reduce energy consumption.
- C. Consider conservation of all forms of energy resources expended by the transportation system.
- D. Increase the use of public transportation, ridesharing, telecommuting, and other activities that help reduce air pollution.
- E. Reduce the risks associated with the transportation of hazardous materials.
- F. Preserve and enhance the natural and cultural resources of the region.
- G. Encourage the development and use of non-motorized facilities and programs.
- H. Implement plans that reduce vehicle emissions.
- I. Mitigate negative effects of the transportation system on:
- -Households and neighborhoods; commercial and industrial facilities;
- -Prime agricultural, open space and recreational resources; and historic sites and districts.

#### Goal 5: Promote Public Involvement/Awareness.

#### **Objectives**

- A. Encourage the public to provide meaningful input into transportation planning and decision-making processes.
- B. Inform and educate the public about the MPO's ongoing planning initiatives and responsibilities.
- C. Inform the public about the transportation planning process on a regional level.
- D. Increase public awareness of air quality issues and mobility office services.
- E. Inform the public of the potential hazards of ground level ozone and advocate solutions.
- F. Increase community awareness of the alternative transportation system.
- G. Develop a network of diverse regional contacts for periodic communication, coordination and involvement.
- H. Use input from all stakeholders in the development of regional transportation plans.

In addition, the MPO will take into consideration the goals of other planning efforts where applicable and appropriate.

#### **CHAPTER 3**

#### **EXISTING TRANSPORTATION SYSTEM**

#### INTRODUCTION

In order to accurately reflect Fayette and Jessamine County's transportation needs, an assessment of what currently exists must be compiled. The following information is a summary of the existing transportation services within Fayette and Jessamine County. This includes air, rail, public transit, freight, as well as the surface road network.

In collecting the data described in this chapter, staff received information from various transportation agencies and/or resources. In addition, staff requested a review of information and findings from the Kentucky Transportation Cabinet. Annual data, provided by local government agencies, is also presented. From these various data sources, the staff has assembled a snapshot of existing transportation resources. This description of the existing transportation systems is intended to serve as a reference or baseline for policy and decision-makers. From this point, future transportation improvements, goals, and objectives can be realized.

#### LOCAL AND NATIONAL TRENDS IN TRAVEL

Transportation problems within the MPO area stem primarily from the imbalance between the amount, timing, and location of urban development and the ability to provide transportation facilities and services. Over the last forty to fifty years, development growth patterns in Lexington, the central city of the region, have predominately moved in a southerly direction toward land seemingly more desirable because of the availability of sewers and other less tangible factors. In more recent years, large areas of land within the designated "urban service area" have been developed or are developing in the North, East, and Southeast Fayette County and North, East, and West Jessamine County. Street and highway plans have not always been implemented completely or lag behind travel demand/traffic congestion due to the ever-present conflict between community-wide and neighborhood/individual desires and the limited funding/resources available for all government programs.

Lexington's original downtown grid pattern was overlaid by a radial street system, which served Lexington as it grew toward the rural areas of the region. However, over time and as urbanization occurred, greater vehicular traffic was placed upon the radial arterial street system without adequate attention to cross-town or circumferential routes. Federal Highway Administration functional classification guidelines recommend that major plus minor arterial streets make up from 15-25% of an urban area's road system and collectors make up 5-10%. In Fayette County, the arterials = 18.23% and collector roads = 15.65%. The indication is that collector roads are serving/functioning as arterial streets within Fayette County.<sup>2</sup>

Lexington is a growing city in the heart of Central Kentucky, and has become the economic, educational, medical, and entertainment hub of the Bluegrass area. However, Jessamine County and Nicholasville, Kentucky, are also growing communities facing the challenges of significant development pressure and are open to seeking economic opportunities.

Many increasing travel trends that the nation has experienced in the past have finally "turned the corner" and have begun to level off or even decrease. These trends include: Person and vehicle trips, annual miles per household, annual trips per household, person trips per day, persons entering the workforce; however, vehicle miles of travel have continued to increase as has time spent driving. See Figure 3.1 below for daily vehicle miles of travel by functional class in Fayette County.

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<sup>&</sup>lt;sup>2</sup> Reference Note: FHWA Functional Classification Guidelines: http://tpd.az.gov/gis/fclass/fc\_fhwa\_gdeln.html

Figure 3.1 - 2001 Daily Vehicle Miles of Travel by Functional Class Lexington Urbanized Area Only

| <b>Functional Class</b> |                 |  |  |  |  |
|-------------------------|-----------------|--|--|--|--|
|                         | Miles of Travel |  |  |  |  |
|                         | DVMT            |  |  |  |  |
| Interstate              | 1,781           |  |  |  |  |
| Principal               | 1,722           |  |  |  |  |
| Arterial                |                 |  |  |  |  |
| Minor Arterial          | 1,807           |  |  |  |  |
| Collector               | 699             |  |  |  |  |
| Local                   | 570             |  |  |  |  |
| Total                   | 7,474           |  |  |  |  |

<sup>\*</sup>Source: US DOT, FHWA: http://www.fhwa.dot.gov/ohim/hs01/hm71.htm

Socio-economically Fayette and Jessamine Counties and the cities of Lexington and Nicholasville are interrelated in such a manner that coordination and cooperation are essential. The tables below show Census Transportation Planning Package (CTPP) profiles for Fayette (Figure 3.2) and Jessamine Counties (Figure 3.3) for 1990 and 2000.

Figure 3.2

| CENSUS TRANSPORTATION PLANNING PACKAGE (CTPP 2000)         |         |         |             |         |                     |         |  |
|--|---------|---------|-------------|---------|---------------------|---------|--|
| Table 1. Profile of Selected 1990 and 2000 Characteristics |         |         |             |         |                     |         |  |
| Geographic Area: Fayette Coun                              |         |         |             |         |                     |         |  |
|  |         | Census  | Census 2000 |         | Change 1990 to 2000 |         |  |
| Subject  | Number  | Percent | Number      | Percent | Number              | Percent |  |
| POPULATION   |         |         |             |         |                     |         |  |
| Total population   | 225,366 | 100     | 260,512     | 100     | 35,146              | 15.6    |  |
| In households  | 212,963 | 94.5    | 247,768     | 95.1    | 34,805              | 16.3    |  |
| In group quarters  | 12,403  | 5.5     | 12,744      | 4.9     | 341                 | 2.7     |  |
| HOUSEHOLD SIZE   |         |         |             |         |                     |         |  |
| Total households   | 89,542  | 100     | 108,411     | 100     | 18,869              | 21.1    |  |
| 1-person household   | 25,975  | 29      | 34,307      | 31.6    | 8,332               | 32.1    |  |
| 2-person household   | 29,827  | 33.3    | 37,165      | 34.3    | 7,338               | 24.6    |  |
| 3-person household   | 15,730  | 17.6    | 17,612      | 16.2    | 1,882               | 12      |  |
| 4-person household   | 11,999  | 13.4    | 12,676      | 11.7    | 677                 | 5.6     |  |
| 5-or-more-person household                                 | 6,011   | 6.7     | 6,651       | 6.1     | 640                 | 10.6    |  |
| Mean number of persons per household                       | 2.38    | (X)     | 2.29        | (X)     | -0.09               | (X)     |  |
| VEHICLES AVAILABLE <sup>1</sup>                            |         |         |             |         |                     |         |  |
| Total households   | 89,542  | 100     | 108,411     | 100     | 18,869              | 21.1    |  |
| No vehicle available                                       | 8,871   | 9.9     | 8,487       | 7.8     | -384                | -4.3    |  |
| 1 vehicle available  | 32,395  | 36.2    | 41,995      | 38.7    | 9,600               | 29.6    |  |
| 2 vehicles available                                       | 34,943  | 39      | 42,988      | 39.7    | 8,045               | 23      |  |
| 3 vehicles available                                       | 10,194  | 11.4    | 11,693      | 10.8    | 1,499               | 14.7    |  |
| 4 vehicles available                                       | 2,559   | 2.9     | 2,527       | 2.3     | -32                 | -1.3    |  |
| 5 or more vehicles available                               | 580     | 0.6     | 721         | 0.7     | 141                 | 24.3    |  |
| Mean vehicles per household                                | 1.63    | (X)     | 1.63        | (X)     | [ >0 ]              | (X)     |  |
| WORKERS BY SEX1  |         |         |             |         |                     |         |  |
| Workers 16 years and over                                  | 116,377 | 100     | 136,795     | 100     | 20,418              | 17.5    |  |
| Male   | 61,380  | 52.7    | 71,850      | 52.5    | 10,470              | 17.1    |  |
| Female   | 54,997  | 47.3    | 64,945      | 47.5    | 9,948               | 18.1    |  |

| MEANS OF TRANSPORTATION TO WORK   |         |      |         |      |        |      |
|---|---------|------|---------|------|--------|------|
| Workers 16 years and over   | 116,377 | 100  | 136,793 | 100  | 20,416 | 17.5 |
| Drove alone   | 91,254  | 78.4 | 109,277 | 79.9 | 18,023 | 19.8 |
| Carpooled   | 13,483  | 11.6 | 15,324  | 11.2 | 1,841  | 13.7 |
| Public transportation (including taxicab)   | 1,854   | 1.6  | 1,764   | 1.3  | -90    | -4.9 |
| Bicycle or walked   | 6,354   | 5.5  | 6,291   | 4.6  | -63    | -1   |
| Motorcycle or other means   | 625     | 0.5  | 699     | 0.5  | 74     | 11.8 |
| Worked at home  | 2,807   | 2.4  | 3,438   | 2.5  | 631    | 22.5 |
| TRAVEL TIME TO WORK   |         |      |         |      |        |      |
| Workers who did not work at home  | 113,570 | 100  | 133,355 | 100  | 19,785 | 17.4 |
| Less than 5 minutes   | 3,372   | 3    | 3,921   | 2.9  | 549    | 16.3 |
| 5 to 9 minutes  | 14,080  | 12.4 | 15,186  | 11.4 | 1,106  | 7.9  |
| 10 to 14 minutes  | 25,248  | 22.2 | 26,507  | 19.9 | 1,259  | į    |
| 15 to 19 minutes  | 29,564  | 26   | 31,837  | 23.9 | 2,273  | 7.7  |
| 20 to 29 minutes  | 25,499  | 22.5 | 32,190  | 24.1 | 6,691  | 26.2 |
| 30 to 44 minutes  | 10,630  | 9.4  | 16,214  | 12.2 | 5,584  | 52.5 |
| 45 or more minutes  | 5,177   | 4.6  | 7,500   | 5.6  | 2,323  | 44.9 |
| Mean travel time to work (minutes) TIME LEAVING HOME TO GO TO WORK  | 17.5    | (X)  | 19.3    | (X)  | 1.9    | (X   |
| Workers who did not work at home  | 113,570 | 100  | 133,355 | 100  | 19,785 | 17.4 |
| 5:00 a.m. to 6:59 a.m.  | 19,129  | 16.8 | 25,727  | 19.3 | 6,598  | 34.5 |
| 7:00 a.m. to 7:59 a.m.  | 41,020  | 36.1 | 45,551  | 34.2 | 4,531  | 1    |
| 8:00 a.m. to 8:59 a.m.  | 22,606  | 19.9 | 24,703  | 18.5 | 2,097  | 9.3  |
| 9:00 a.m. to 9:59 a.m.  | 7,027   | 6.2  | 8,500   | 6.4  | 1,473  | 2    |
| 10:00 a.m. to 11:59 a.m.  | 4,660   | 4.1  | 5,421   | 4.1  | 761    | 16.3 |
| 12:00 p.m. to 11:59 p.m.  | 17,393  | 15.3 | 21,212  | 15.9 | 3,819  | 22   |
| 12:00 a.m. to 4:59 a.m. 1See the entry for this item in the Technical Notes in the root directory or state subdirectories (filename: tech_notes.txt). | 1,735   | 1.5  | 2,241   | 1.7  | 506    | 29.2 |
| >0Value is too near zero to display.  |         |      |         |      |        |      |
| (X)Not applicable.  |         |      |         |      |        |      |
| Source:U.S. Census Bureau. Census of  |         |      |         |      |        |      |

# CENSUS TRANSPORTATION PLANNING PACKAGE (CTPP 2000)

**Table 2. Profile of Selected 2000 Characteristics** 

Geographic Area: Fayette County, Kentucky

Population and Housing, 1990 and 2000

|                   | Census 2000   |      |  |
|-------------------|---------------|------|--|
| Subject           | Number Percen |      |  |
| POPULATION BY AGE |               |      |  |
| Total population  | 260,512       | 100  |  |
| Under 16 years    | 49,729        | 19.1 |  |
| 16 to 20 years    | 21,119        | 8.1  |  |
| 21 to 24 years    | 22,429        | 8.6  |  |
| 25 to 44 years    | 86,712        | 33.3 |  |
| 45 to 64 years    | 54,525        | 20.9 |  |
| 65 years and over | 25,998        | 10   |  |

| Mean age (years)                     |              | 20                                       |                           |                        |                   |                 |                 |                |
|--------------------------------------|--------------|--|---------------------------|------------------------|-------------------|-----------------|-----------------|----------------|
| HOUSELOLD MOONE IN 19991             | 34.7         | (X)                                      |                           |                        |                   |                 |                 |                |
| HOUSEHOLD INCOME IN 1999             | 100 111      | 100                                      |                           |                        |                   |                 |                 |                |
| Total households                     | 108,411      | 100                                      |                           |                        |                   |                 |                 |                |
| Less than \$15,000                   | 18,745       | 17.3                                     |                           |                        |                   |                 |                 |                |
| \$15,000 to 19,999                   | 7,295        | 6.7                                      |                           |                        |                   |                 |                 |                |
| \$20,000 to 24,999                   | 8,131        | 7.5                                      |                           |                        |                   |                 |                 |                |
| \$25,000 to 49,999                   | 31,363       | 28.9                                     |                           |                        |                   |                 |                 |                |
| \$50,000 to 74,999                   | 20,068       | 18.5                                     |                           |                        |                   |                 |                 |                |
| \$75,000 to 99,999                   | 10,334       | 9.5                                      |                           |                        |                   |                 |                 |                |
| \$100,000 or more                    | 12,475       | 11.5                                     |                           |                        |                   |                 |                 |                |
| Mean household income (dollars)      | 54,340       | (X)                                      |                           |                        |                   |                 |                 |                |
| Median household income (dollars)    | 39,813       | (X)                                      | Vehielee Av               | oiloblo <sup>1</sup>   |                   |                 |                 |                |
|                                      | пос          | usehold Size by                          | venicies Av               | aliable                | \/ahialaa         | ovejleble       |                 |                |
| Household Size                       |              | Mean vehicles<br>per household           | Total households          | No<br>vehicle          | Vehicles :        | 2<br>vehicles   | 3<br>vehicles   | 4+<br>vehicles |
| Total households                     |              | 1.63                                     | 108,410                   | 8,485                  | 41,995            | 42,990          | 11,695          | 3,250          |
|                                      | Row %        | (X)                                      | 100                       | 7.8                    | 38.7              | 39.7            | 10.8            | 3              |
|                                      | Column %     | (X)                                      | 100                       | 100                    | 100               | 100             | 100             | 100            |
| 1-person household                   |              | 0.99                                     | 34,305                    | 5,205                  | 25,370            | 3,105           | 450             | 180            |
|                                      | Row %        | (X)                                      | 100                       | 15.2                   | 74                | 9.1             | 1.3             | 0.5            |
|                                      | Column %     | (X)                                      | 31.6                      | 61.3                   | 60.4              | 7.2             | 3.8             | 5.5            |
| 2-person household                   |              | 1.78                                     | 37,165                    | 1,700                  | 9,565             | 21,850          | 3,420           | 630            |
|                                      | Row %        | (X)                                      | 100                       | 4.6                    | 25.7              | 58.8            | 9.2             | 1.7            |
|                                      | Column %     | (X)                                      | 34.3                      | 20                     | 22.8              | 50.8            | 29.2            | 19.4           |
| 3-person household                   |              | 2.02                                     | 17,610                    | 910                    | 3,750             | 8,050           | 4,125           | 780            |
|                                      | Row %        | (X)                                      | 100                       | 5.2                    | 21.3              | 45.7            | 23.4            | 4.4            |
|                                      | Column %     | (X)                                      | 16.2                      | 10.7                   | 8.9               | 18.7            | 35.3            | 24             |
| 4-or-more-person household           |              | 2.15                                     | 19,325                    | 675                    | 3,310             | 9,980           | 3,700           | 1,665          |
|                                      | Row %        | (X)                                      | 100                       | 3.5                    | 17.1              | 51.6            | 19.1            | 8.6            |
|                                      | Column %     | (X)                                      | 17.8                      | 8                      | 7.9               | 23.2            | 31.6            | 51.2           |
| ı                                    | Means of Tra | nsportation to \                         | Nork by Trav              | el Time to             | Work <sup>1</sup> |                 |                 |                |
|                                      |              |  |                           |                        | Travel tim        | e to work       |                 |                |
| Means of Transportation              | 1            | Mean travel<br>time to work<br>(minutes) | Not<br>working at<br>home | Less<br>than 10<br>min | 10 to 19<br>min   | 20 to 29<br>min | 30 to 44<br>min | 45+ min        |
| Workers who did not work at home     |              | 19.3                                     | 133,355                   | 19,105                 | 58,345            | 32,190          | 16,215          | 7,500          |
|                                      | Row %        | (X)                                      | 100                       | 14.3                   | 43.8              | 24.1            | 12.2            | 5.6            |
|                                      | Column %     | (X)                                      | 100                       | 100                    | 100               | 100             | 100             | 100            |
| Drove alone                          | •            | 19.2                                     | 109,275                   | 14,795                 | 48,815            | 27,185          | 13,010          | 5,470          |
|                                      | Row %        | (X)                                      | 100                       | 13.5                   | 44.7              | 24.9            | 11.9            | 5              |
|                                      | Column %     | (X)                                      | 81.9                      | 77.4                   | 83.7              | 84.5            | 80.2            | 72.9           |
| Carpooled                            | 1            | 20.8                                     | 15,325                    | 1,775                  | 6,285             | 3,700           | 2,420           | 1,145          |
|                                      | Row %        | (X)                                      | 100                       | 11.6                   | 41                | 24.1            | 15.8            | 7.5            |
|                                      | Column %     | (X)                                      | 11.5                      | 9.3                    | 10.8              | 11.5            | 14.9            | 15.3           |
| Public transportation (including tax | icab)        | 33.7                                     | 1,765                     | 50                     | 460               | 325             | 375             | 550            |
|                                      | Row %        | (X)                                      | 100                       | 2.8                    | 26.1              | 18.4            | 21.2            | 31.2           |
|                                      | Column %     | (X)                                      | 1.3                       | 0.3                    | 0.8               | 1               | 2.3             | 7.3            |
| Bicycle or walked                    | 1            | 13.3                                     | 6,290                     | 2,400                  | 2,525             | 825             | 355             | 185            |
|                                      | Row %        | (X)                                      | 100                       | 38.2                   | 40.1              | 13.1            | 5.6             | 2.9            |
|                                      | Column %     | (X)                                      | 4.7                       | 12.6                   | 4.3               | 2.6             | 2.2             | 2.5            |
| Motorcycle or other means            | 1            | 33.1                                     | 700                       | 90                     | 255               | 150             | 55              | 150            |
|                                      | Row %        | (X)                                      | 100                       | 12.9                   | 36.4              | 21.4            | 7.9             | 21.4           |
|                                      | Column %     | (X)                                      | 0.5                       | 0.5                    | 0.4               | 0.5             | 0.3             | 2              |

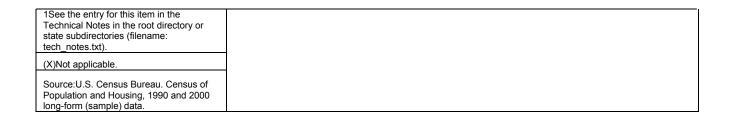


Figure 3.3

| CENSUS TRANSPORTATION PLANNING PACKAGE (CTPP 2000)  |  |         |        |                     |        |         |  |  |
|---|--|---------|--------|---------------------|--------|---------|--|--|
| SENSO MANOI SKIATION I EARNING I ASKAGE (STIT 2000) |  |         |        |                     |        |         |  |  |
| Table 1   | Table 1. Profile of Selected 1990 and 2000 Characteristics |         |        |                     |        |         |  |  |
| Geographic Area: Jessamine Cour                     | ty, Kentucky   | 1       |        | 1                   |        |         |  |  |
|   | 1990 Census Census 2000                                    |         |        | Change 1990 to 2000 |        |         |  |  |
| Subject   | Number   | Percent | Number | Percent             | Number | Percent |  |  |
| POPULATION  |  |         |        |                     |        |         |  |  |
| Total population                                    | 30,508   | 100     | 39,041 | 100                 | 8,533  | 28      |  |  |
| In households                                       | 29,323   | 96.1    | 37,233 | 95.4                | 7,910  | 27      |  |  |
| In group quarters                                   | 1,185  | 3.9     | 1,808  | 4.6                 | 623    | 52.6    |  |  |
| HOUSEHOLD SIZE                                      |  |         |        |                     |        |         |  |  |
| Total households                                    | 10,532   | 100     | 13,862 | 100                 | 3,330  | 31.6    |  |  |
| 1-person household                                  | 1,730  | 16.4    | 2,561  | 18.5                | 831    | 48      |  |  |
| 2-person household                                  | 3,500  | 33.2    | 4,787  | 34.5                | 1,287  | 36.8    |  |  |
| 3-person household                                  | 2,195  | 20.8    | 2,859  | 20.6                | 664    | 30.3    |  |  |
| 4-person household                                  | 2,033  | 19.3    | 2,344  | 16.9                | 311    | 15.3    |  |  |
| 5-or-more-person household                          | 1,074  | 10.2    | 1,311  | 9.5                 | 237    | 22.1    |  |  |
| Mean number of persons per household                | 2.78   | (X)     | 2.69   | (X)                 | -0.1   | (X)     |  |  |
| VEHICLES AVAILABLE <sup>1</sup>                     |  |         |        |                     |        |         |  |  |
| Total households                                    | 10,532   | 100     | 13,862 | 100                 | 3,330  | 31.6    |  |  |
| No vehicle available                                | 631  | 6       | 867    | 6.3                 | 236    | 37.4    |  |  |
| 1 vehicle available                                 | 3,083  | 29.3    | 3,916  | 28.2                | 833    | 27      |  |  |
| 2 vehicles available                                | 4,534  | 43      | 6,165  | 44.5                | 1,631  | 36      |  |  |
| 3 vehicles available                                | 1,540  | 14.6    | 2,197  | 15.8                | 657    | 42.7    |  |  |
| 4 vehicles available                                | 553  | 5.3     | 572    | 4.1                 | 19     | 3.4     |  |  |
| 5 or more vehicles available                        | 191  | 1.8     | 145    | 1                   | -46    | -24.1   |  |  |
| Mean vehicles per household                         | 1.9  | (X)     | 1.87   | (X)                 | -0.03  | (X)     |  |  |
| WORKERS BY SEX1                                     |  |         |        |                     |        |         |  |  |
| Workers 16 years and over                           | 14,974   | 100     | 18,885 | 100                 | 3,911  | 26.1    |  |  |
| Male  | 8,305  | 55.5    | 10,135 | 53.7                | 1,830  | 22      |  |  |
| Female  | 6,669  | 44.5    | 8,750  | 46.3                | 2,081  | 31.2    |  |  |
| MEANS OF TRANSPORTATION TO WORK                     |  |         |        |                     |        |         |  |  |
| Workers 16 years and over                           | 14,974   | 100     | 18,885 | 100                 | 3,911  | 26.1    |  |  |
| Drove alone   | 11,453   | 76.5    | 14,827 | 78.5                | 3,374  | 29.5    |  |  |
| Carpooled   | 2,080  | 13.9    | 2,526  | 13.4                | 446    | 21.4    |  |  |
| Public transportation (including taxicab)           | 13   | 0.1     | 30     | 0.2                 | 17     | 130.8   |  |  |
| Bicycle or walked                                   | 832  | 5.6     | 677    | 3.6                 | -155   | -18.6   |  |  |
| Motorcycle or other means                           | 107  | 0.7     | 133    | 0.7                 | 26     | 24.3    |  |  |
| Worked at home                                      | 489  | 3.3     | 692    | 3.7                 | 203    | 41.5    |  |  |
| TRAVEL TIME TO WORK                                 |  |         |        |                     |        |         |  |  |
|   |  |         |        |                     |        |         |  |  |
| Workers who did not work at home                    | 14,485   | 100     | 18,193 | 100                 | 3,708  | 25.6    |  |  |

#### **CHAPTER 3 – EXISTING TRANSPORTATION SYSTEM**

| Less than 5 minutes   | 836    | 5.8  | 1,095  | 6    | 259   | 31   |
|---|--------|------|--------|------|-------|------|
| 5 to 9 minutes  | 1,993  | 13.8 | 2,316  | 12.7 | 323   | 16.2 |
| 10 to 14 minutes  | 1,729  | 11.9 | 2,698  | 14.8 | 969   | 56   |
| 15 to 19 minutes  | 1,862  | 12.9 | 1,959  | 10.8 | 97    | 5.2  |
| 20 to 29 minutes  | 3,009  | 20.8 | 3,569  | 19.6 | 560   | 18.6 |
| 30 to 44 minutes  | 3,919  | 27.1 | 4,531  | 24.9 | 612   | 15.6 |
| 45 or more minutes  | 1,137  | 7.8  | 2,025  | 11.1 | 888   | 78.1 |
| Mean travel time to work (minutes)  | 21.7   | (X)  | 24.1   | (X)  | 2.4   | (X)  |
| TIME LEAVING HOME TO GO TO WORK   |        |      |        |      |       |      |
| Workers who did not work at home  | 14,485 | 100  | 18,193 | 100  | 3,708 | 25.6 |
| 5:00 a.m. to 6:59 a.m.  | 3,178  | 21.9 | 4,644  | 25.5 | 1,466 | 46.1 |
| 7:00 a.m. to 7:59 a.m.  | 5,250  | 36.2 | 5,833  | 32.1 | 583   | 11.1 |
| 8:00 a.m. to 8:59 a.m.  | 2,053  | 14.2 | 2,960  | 16.3 | 907   | 44.2 |
| 9:00 a.m. to 9:59 a.m.  | 657    | 4.5  | 814    | 4.5  | 157   | 23.9 |
| 10:00 a.m. to 11:59 a.m.  | 519    | 3.6  | 614    | 3.4  | 95    | 18.3 |
| 12:00 p.m. to 11:59 p.m.  | 2,410  | 16.6 | 2,873  | 15.8 | 463   | 19.2 |
| 12:00 a.m. to 4:59 a.m.   | 418    | 2.9  | 455    | 2.5  | 37    | 8.9  |
| 1See the entry for this item in the Technical Notes in the root directory or state subdirectories (filename: tech_notes.txt). |        |      |        |      |       |      |
| (X)Not applicable.  |        |      |        |      |       |      |
| Source:U.S. Census Bureau. Census of Population and Housing, 1990 and 2000 longform (sample) data.                            |        |      |        |      |       |      |

## **SURFACE ROAD NETWORK Fayette County**

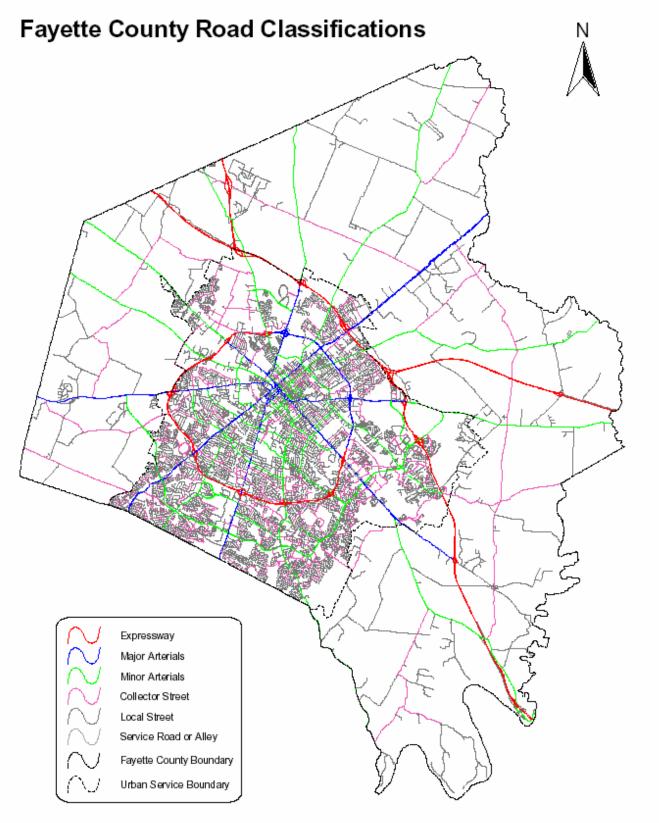
As in most metropolitan areas in the United States, the dominant system of transportation in the Lexington area is the highway system. Fayette County contains most of Central Kentucky's largest urbanized area, and serves as the leading market and trade center for the region. It also provides major employment, education, health-care, and many other services and opportunities to Central Kentuckians. Because portions of the Census Urbanized Area extend south into Jessamine County, the planning study area is made up of these two counties as shown on the *MPO Planning Area Map* (Chapter 1).

Figure 3.4 - 2004 Total Road Miles by Classification – Fayette County

| ROAD CLASSIFICATION       | MILES    | % OF TOTAL |
|---------------------------|----------|------------|
| Interstate                | 89.64    | 5.95%      |
| Limited Access/Expressway | 40.18    | 2.67%      |
| Major Arterial            | 97.90    | 6.50%      |
| Minor Arterial            | 176.86   | 11.73%     |
| Collector                 | 235.86   | 15.65%     |
| Local                     | 853.22   | 56.61%     |
| Service Road              | 6.26     | 0.42%      |
| Alley                     | 7.35     | 0.49%      |
| TOTAL                     | 1,507.27 | 100 %      |

Source: LFUCG GIS Services

Figure 3.5



The urbanized area's highway system is a radial system with several principal arterial and secondary roads radiating outward from the Central Business District to surrounding smaller central Kentucky communities. KY-4 (New Circle Road) is a circumferential arterial that encompasses a large portion of the urbanized area. The northeast portion is non-limited access with numerous signals and access points. The rest is interchange access only expressway. See Figure 3.4 for total miles by classification in Fayette County.

Man o' War Boulevard parallels New Circle Road on its southern half and serves a large area of mostly residential land-use. In the North, Citation Boulevard is currently built in from the Norfolk Southern Railroad across Georgetown Road (US-25) to Newtown Pike (KY-922). A second phase is programmed to extend Citation from the railroad tracks Southwest to Leestown Road (US-421) around 2008. This circumferential arterial will serve large areas of industrial, office, research park, and some residential land-use. A network of minor arterials, major and minor collectors, and local roads make up the remainder of the system and serve as access to the various land uses. Circumferential routes, which connect the radial arterials, are extremely important for the efficient distribution of traffic in this radial system (see Figure 3.5).

To maximize the efficiency of this highway system, Lexington-Fayette Urban County has one of the most sophisticated and efficient computerized traffic signal systems in the country. Television cameras with vehicle sensing capability and in-pavement loops make up a complex traffic surveillance system.

The Lexington area is a junction point for two major interstate routes: east-west I-64 and north-south I-75. In the north of Fayette County, the two interstate routes join in a "Y" fashion and run diagonally along the northeast border of the urbanized area dividing again into a "Y" to the southeast of the area. Traffic volumes along the common section of I-64/I-75 have increased approximately 30 to 90% since 1990. Today the average daily traffic exceeds 75,000 vehicles along the heaviest traveled sections. During peak annual travel periods (or the holidays) volume increases are greater than 70%. Truck traffic on I-64 and I-75 exceed 25%. For these reasons, plans to improve the Central Kentucky interstate system will continue to be an emphasis in the future.

The urban area's interstate system is unique in that it runs along the northeast border instead of through the center of the urbanized area, which eliminates many of the problems commonly associated with interstate traffic in urban areas; however, interstate trips with origins or destinations to the south and west of the Lexington area must travel through large portions of the urbanized area to enter or leave the interstate. This "through-urban-area" traffic causes congestion at many locations in the road system.

Access to and from the Lexington urbanized area is provided by the interstate system via five interchanges. From north to south these interchanges are: (1) KY 922 (Newtown Road), (2) U.S. 27/68 (Paris Pike), (3) U.S. 60 (Winchester Road), (4) Man o' War Boulevard, (5) KY 418 (Athens-Boonesboro Road). Two additional interchanges provide access for two of Fayette County's main rural activity centers. One at the interchange on northern I-75 at KY 1973 (Iron Works Pike) to Spindletop Farm, an office park, research farm and University of Kentucky alumni club, and the Kentucky Horse Park; and the other interchange on eastern I-64 at KY 859 (Haley Road) to Lexington Blue Grass Army Depot at Avon.

#### Jessamine County JESSAMINE COUNTY HIGHWAY SYSTEMJESSAMINE COUNTY HIGHWAY SYSTEM

The two main north-south highways in Jessamine County are U.S. 27 and U.S. 68. U.S. 27 is designated as part of the National Highway System. It traverses the approximate center of the county and the centrally located city of Nicholasville. U.S. 27 continues south and crosses the Kentucky River, at the Jessamine/Garrard County Line. It is a primary arterial to and from the Lexington urbanized area and areas in south-central Kentucky. U.S. 27 carries the largest volumes of traffic in the county, ranging from approximately 21,000 average daily vehicle trips (ADT) near the Jessamine/Garrard County line to 52,100 ADT north of Nicholasville. Since 1990, these volumes have increased 50 and 80 % respectively.

The City of Nicholasville has a limited access bypass which splits from U.S. 27 just north of the city and loops around the western side of Nicholasville, re-joining U.S. 27 to the south of the city. The bypass has helped relieve traffic congestion along Main Street in the city of Nicholasville and has helped encourage planned development by providing excellent accessibility to large tracts of land. A project is underway to build an eastern bypass around

Nicholasville. The West Bypass intersects with State Highway KY-169 and has an underpass at KY-29. These two cross-route collector highways provide access to Nicholasville from U.S. 68. State Highway KY-29 also provides access to Nicholasville for the smaller city of Wilmore, which lies to the southwest of Nicholasville in Jessamine County.

U.S. 68 parallels U.S. 27 and roughly splits the western half of the county and is Jessamine County's second most used arterial, ranging approximately 11,000 average daily trips (ADT) at the Kentucky River to over 18,000 ADT near the Fayette County line. It runs southwest from the southwest corner of the Lexington-Fayette urbanized area to the Jessamine/Mercer County line, where it crosses the Kentucky River.

U.S. 68 is mostly rural in character and serves as a major route to/from the Jessamine County city of Wilmore and as an alternative route to/from Nicholasville. The corridor has experienced a great deal of residential, public, and commercial development in recent years. The heaviest northern portion as it approaches Fayette County is currently being improved.

The remainder of the Jessamine County major road system consists of state collector roads that provide access to the main highway system, the majority of which are rural in character. Inadequate width, poor sight distance, numerous horizontal and vertical curves, steep slopes or drop-offs, and unsafe or poorly designed access points are all problems that exist along these roads. As Jessamine County grows and future traffic volumes increase, improvements to these roads will be necessary to provide for the safe and efficient flow of traffic.

#### SCHOOL TRANSPORTATION SERVICES

As of 2002, there were approximately 32,648 students in total attending K-12 school programs in Fayette County. The Fayette County School Board has fleets of vehicles that transport students to general education facilities and to specialized programs.

Fayette County School Transportation:

| Total number of buses                      | 200    |
|--|--------|
| Total number of daily bus runs             | 1,075  |
| Miles traveled daily                       | 15,000 |
| Total number of students assigned to buses | 14,616 |

In Jessamine County, during the 2002-2003 school year total enrollment is 6,845 and Jessamine County Schools of Transportation has 100 buses. Approximately 3,500 students ride buses daily. In the current year buses traveled 1,081,045 miles, over 6,000 miles per school day.

#### TAXICAB AND LIMOUSINE SERVICES

There are several taxicab and limousine services operating throughout Fayette County, predominantly in the urbanized areas. They provide service for short trips around town, to and from the airport and other leisure activities.

#### WATER TRANSPORTATION

Fayette and Jessamine County are land locked counties; therefore much of the marine activity in the Lexington Area MPO region is limited to recreational boat access sites located on the county's inland streams and lakes. The Kentucky River is the largest river in the MPO area and is utilized for boating, canoeing, and fishing. From the transportation standpoint, Jessamine County is the only county that has a historical ferry on the Kentucky River. The Valley View Ferry was purchased by the governments of Jessamine, Fayette, and Madison counties in 1991. The Valley View Ferry Authority now oversees daily operation. The ferry is located near the Madison county

community of Valley View. Its importance lies in the fact that it is the closest point of the Kentucky River to Lexington and serves as the main river crossing point of travelers from Lexington to Richmond and points south.

#### **RAILROADS**

#### **Passenger Rail**

AMTRAK operates the Kentucky Cardinal Service from Louisville-Jeffersonville Indiana seven days a week serving Indianapolis and Chicago. From Chicago connections can be made to Washington DC, New York City, and other major cities. Currently, the closest passenger rail facilities in MPO area are:

Cincinnati, Ohio: about 83 miles to downtown Lexington. The station's services are: Staffed Station, Enclosed Waiting Area, Restrooms, Payphones, Free Short Term Parking, Paid Long Term Parking, Restaurant. Accessibility: Fully accessible to persons using wheelchairs. On Sunday, Wednesday and Friday service is provided from Cincinnati, to Chicago. Departure time for Chicago is 2:48 am.

**Maysville, Kentucky:** about 64 miles to downtown Lexington. The station's services are; Unstaffed Station, Enclosed Waiting Area, Restrooms, Payphones, Free Short Term Parking, Free Long Term Parking, Restaurant. Accessibility: Partially accessible to persons using wheelchairs. On Sunday, Wednesday and Friday eastbound and westbound service is provided from Maysville Kentucky to Cincinnati and Chicago, Departure time for this service is 1:14 am.

**Louisville-Jeffersonville, Indiana (LJV):** about 78 miles to downtown Lexington. The station's services are; Unstaffed Station, Enclosed Waiting Area. Daily service is provided from Louisville to Indianapolis and Chicago. Departure time for Chicago is 9:20 pm.

Additional information on scheduling can be obtained by calling AMTRAK at 1-800-872-7245 or going to the web at AMTRAK.com.

#### **Light Rail**

The North American Light Rail Information Website defines Light Rail as: An electric railway system characterized by its ability to operate single or multiple car consists along exclusive rights-of-way at ground level, on aerial structures, in subways or in streets, able to board and discharge passengers at station platforms or at street, track, or car-floor level and is normally powered by overhead electrical wires. Light Rail is and has been area of interest for the Lexington Area MPO for many years.

Lexington Kentucky Mayor Teresa Isaac (Chair of the MPO Transportation Policy Committee) has had a special interest in light rail for the Lexington urban area for many years. Mayor Isaac and Lexington Chief Administrative Officer Milton Dohoney brought officials from Louisville Kentucky's Transit Authority of River City (TARC) to discuss their current light rail initiatives with Lexington Fayette Urban County Government (LFUCG) Staff and Lexington Area MPO Staff. This started the MPO Staff to begin light rail research and to work light rail visioning into the Lexington Area MPO transportation planning process.

The document "New Urban Rail in America" (The Public Purpose, No. 16, 1997) is one publication that investigates the feasibility of light rail in urban areas and examines whether passenger rail is in accordance with local travel demand. Light rail service moves passengers in intermediate-size groups on short trains. Rail transit feasibility is linked to such factors as; the total population of an urban area and its radial distribution, the length of trips, and the volume of trips downtown. The report identifies Louisville and Cincinnati, in 1997, as cities with limited potential for light rail service given the size of the populations, their geographic distribution, and their distance from the central business district. The Lexington area has a much smaller population and non-residential floor space than these two areas. In addition, there are tremendous capital costs and high operating costs inherent with implementing a passenger rail system. It is also unlikely that passenger rail service could be implemented

using existing freight rail lines due to the increasing demand experienced by freight carriers today. These factors all indicated that light rail is not cost effective at this time or in the near future.

While currently economically unfeasible, this plan and subsequent plans should continue to investigate/examine the potential role and the feasibility of light rail in the future transportation system of the Lexington Area.

#### **FREIGHT**

#### Introduction

The movement of goods and people is an important component of the long range planning process. Because of the concern for transportation safety and security and the projected growth in the volume of freight traffic over the next several years, Lexington Area MPO will dedicate its planning resources to begin to better address the concerns of the public and businesses throughout the MPO area.

Since freight transportation is a means to various regional economic ends, changes to the regional economy, such as manufacturing and retail, directly impact freight transportation and vice versa. In addition, access to raw materials and markets are key factors in the location decision of most manufacturing and distribution companies. Supporting an efficient freight infrastructure will require coordination among the various modes of freight transportation. An efficient freight movement system expands markets, increases opportunity, production, and competition. For more information on freight, please visit <a href="http://ops.fhwa.dot.gov/freight/index.cfm">http://ops.fhwa.dot.gov/freight/index.cfm</a>.

#### **Trucking**

The trucking industry is a vital component of the goods movement system because at one point or another in freight shipment, almost all goods and services are moved by truck. The typical freight "trip" usually involves three to six moves within the freight system--many of them by truck.

The pattern of industrial and commercial development has changed with the advent of motorized trucks. Early businesses that used transportation for goods movement were required to locate contiguous to railroad facilities. Trucks enabled freight producers and attractors to locate anywhere that a good road existed.

There are more than 50 motor carriers that service the Lexington and various other geographical areas. More than 21 of these carriers operate terminals locally. These carriers fall under various classes according to the type of carrier and the type of commodities carried. There are also numerous service trucks, e.g., telephone, water, gas, electricity; and craftsman vehicles, e.g., painters, plumbers, and electricians. These vehicles are classified as trucks and contribute to area traffic and parking (excluding weekends) but seldom carry goods.

Figure 3.6 - 2004 Fayette County Vehicle Registrations

| Passenger | Farm   | Commercial | Motor- | Truck    | Camp     | House    | House | Disabled | Apportioned | Total    |
|-----------|--------|------------|--------|----------|----------|----------|-------|----------|-------------|----------|
| Cars      | Trucks | Trucks     | cycles | Trailers | Trailers | Trailers | Car   | Parking  |             | Vehicles |
| 117088    | 1873   | 58158      | 3813   | 2200     | 1862     | 192      | 708   | 511      | 1057        | 187462   |
| 62.46%    | 1.00%  | 31.02%     | 2.03%  | 1.17%    | 0.99%    | 0.10%    | 0.38% | 0.27%    | 0.56%       | 100%     |

Source: Kentucky Transportation Cabinet

Figure 3.7 - 2004 Jessamine County Vehicle Registrations

|   | Passenger | Farm   | Commercial | Motor- | Truck    | Camp     | House    | House | Disabled | Apportioned | Total    |
|---|-----------|--------|------------|--------|----------|----------|----------|-------|----------|-------------|----------|
| ı | Cars      | Trucks | Trucks     | cycles | Trailers | Trailers | Trailers | Car   | Parking  |             | Vehicles |
| ı | 21587     | 1625   | 13973      | 758    | 736      | 754      | 17       | 152   | 152      | 421         | 40175    |
|   | 53.73%    | 4.04%  | 34.78%     | 1.89%  | 1.83%    | 1.88%    | 0.04%    | 0.38% | 0.38%    | 1.05%       | 100%     |

Source: Kentucky Transportation Cabinet

Trucks, recreational vehicles, and buses affect traffic flow in two ways: (1) they occupy more space on the roadway than cars, and (2) the operating capabilities of such vehicles (acceleration, deceleration, maintenance of

speed, etc.) are inferior to those of passenger cars. Passenger car equivalents (the number of passenger cars that are displaced by a single heavy vehicle) are two or more for every truck. The end result of truck traffic is less efficient traffic flow with gaps that cannot readily be filled by passing maneuvers; thus, roadway-operating capacity is lowered.

According to the state publication, <u>Traffic Characteristics of Kentucky Highways 1997</u>, the percentage of truck traffic on the Lexington MPO area highway system varies between rural and urban areas, and facility types. As in most areas, the highest truck volumes are found on the rural and urban interstates and principal and minor arterials. Listed below are some examples of 1996 truck traffic percentages of total average daily traffic (ADT) at selected locations and facility types.

- I-75/I-64 Urban Interstate between Newtown Road (KY 922) and Paris Pike (US 27/68), trucks = 22.1% of total ADT.
- New Circle Rd. (KY-4) Urban arterial between Newtown Road (KY 822) and Paris Road (US 25), trucks = 5.9% of total ADT.
- Versailles Rd. (US 60) Urban arterial, inside New Circle Road (KY 4), trucks = 2.8% of total ADT.
- Paris Pike (US 27/68) Minor arterial, between New Circle and I-64/I-75, trucks = 4.4% of total ADT.

Updated information for these road segments was not available in the 2003 Traffic Forecasting Report.

Nearly all truck companies operating in the area do so from a base in the Lexington urban area. A truck terminal usually consists of a dock (the number of bays varies) upon which freight is sorted and deposited in another truck or other mode. In the Lexington urban area, truck terminals are concentrated in the industrial and wholesale/warehouse zones that are located primarily in the north. This puts them in close proximity to the interstates and allows ease of access with other regional population centers. The 2001 *Comprehensive Plan* map illustrates these and other land use concentrations and can be obtained from:

The Lexington-Fayette Urban County Government Center - Division of Planning
10th Floor, 200 East Main Street
Lexington, Kentucky 40507
Phone - (859)-258-3160

Other shippers/receivers of goods are concentrated along major arterials in retail, professional service, and commercial zones (e.g., malls, shopping centers, universities, and office parks).

There are over 29 carriers serving the Nicholasville area. Primarily, these carriers use U.S. 27 and the Nicholasville bypass to provide freight service. Trucks (including pickup trucks) accounted for approximately 22% of total daily traffic on U.S. 27 north and south of Nicholasville. Jessamine County industrial zones that ship and receive freight are concentrated primarily along or near U.S. 27 or the Nicholasville bypass.

In order to achieve the quickest time path, truck traffic in the Lexington planning area tends to follow the area's major roadways to the greatest extent possible. Only when approaching a destination, away from the major road network, do they utilize local streets. In addition, the majority of pickup and delivery truck trips occur during regular business hours, thus avoiding peak hour congestion or delay. Local and national studies show that Mondays and Fridays tend to be very heavy days in terms of pickups and deliveries.

In Fayette County, through truck trips (without a local destination) are required by city ordinance to use New Circle Road (avoiding the inner urban area) or the interstates to the north (avoiding the urban area altogether). New Circle Road is the only officially designated truck route in the area as it provides access that penetrates or is near all light and heavy industrial zoning in the Lexington urban area and is less than a mile by major arterial away from three interchanges with I-64/I-75. According to KYTC, Figure 3.8 shows the list of designated truck network in Fayette and Jessamine County.

Figure 3.8 - Designated Truck Network in Fayette and Jessamine County:

| Route  | County    | Description  | Length | Source  |
|--------|-----------|--|--------|---------|
| KY 4   | Fayette   | New Circle Rd. In Lexington (entire circle)            | 19.283 | Federal |
| US 25  | Fayette   | From KY 418 SE of Lexington to KY 4                    | 2.544  | Federal |
| US 26  | Fayette   | From KY 4 to Nandino Blvd                              | 0.215  | Federal |
| US 27  | Jessamine | From Garrard Co. Line to Fayette Co. Line              | 15.278 | Federal |
| US 27  | Fayette   | From Jessamine Co. To KY 4                             | 2.412  | Federal |
| US 27  | Fayette   | From KY 4 to Bourbon Co. Line                          | 7.317  | Federal |
| US 60  | Fayette   | From KY 4 Interchange to I-75 Interchange              | 1.892  | Federal |
| I-64   | Fayette   | From Scott Co. Line to I-75 N. of Lexington            | 3.729  | Federal |
| I-64   | Fayette   | From I-75 Intchg. to E. of Lexington to Clark Co. Line | 8.443  | Federal |
| KY 418 | Fayette   | From US 25 S. of Lexington to SE limits of I-75        | 2.602  | Federal |
| US 421 | Fayette   | From KY 4 in Lexington to Scott Co. Line               | 6.408  | State   |
| KY 922 | Fayette   | From KY 4 in Lexington to N. limits of I-64/I-75       | 2.02   | Federal |

Source: Kentucky Transportation Cabinet, 28-Aug-03

State motor vehicle regulations set maximum limits on weight, height, width, and length of vehicles that operate on the many state roads in the Lexington area. There are no local ordinances controlling vehicle weights on non-state highways.

The LFUCG Division of Traffic Engineering prohibits trucks and through truck movement in many locations in the area by posting signs that read "No Trucks" or "No Thru Trucks," which is enforced by local police. Most signs have been placed in response to complaints from local residents in neighborhoods where it has been determined that truck traffic conflicts with residential areas and is inappropriate.

Pick-ups and deliveries (or loading and unloading) are one of the most costly functions in truck trips in terms of time and money. Truck movement often conflicts with traffic movement when searching for parking space, parking, loading and unloading. Generally, periphery areas have sufficient space for trucks to pull off the road to load or unload, whereas central city areas where parking is scarce tend to have more truck-traffic conflict. To alleviate this conflict, the LFUCG Division of Traffic Engineering has designated on-street loading zones where needed. These signs read "No Parking - Loading Zone - Commercial Vehicles Only." Many of these are restricted to use only in off peak traffic periods.

# Freight Rail

The Lexington MPO planning area is served primarily by two of the nation's busiest railroads and one short line railroad: CSX Transportation and Norfolk Southern Corporation, both of which are Class I. Figure 3.9 shows the railroads and switching yards, which exist in the Lexington MPO planning area.

Today's rail freight service is customers demand "just-in-time" and consistent service to meet their schedules. This demand puts a premium on railway capacity and currently prohibits the consideration of passenger rail services by most of the nation's major rail freight carriers. To remain competitive, many railways offer a full range of distribution services, whether rail, truck, barge, aircraft, or a combination of all four. In addition, this demand has resulted in innovative advancements in many areas, which include intermodal transfer facilities, rail/tank car design, logistics, inter-industry cooperation, and safety.

## **CSX Transportation**

CSX is a freight-only service that route connecting Louisville, Lexington and Winchester. Major commodities originated and/or moved through/from Kentucky are coal, grains, forest products, automobiles, chemicals, paper, building materials, food, and consumer products.

CSX Transportation has approximately 23 miles of heavy rail, main-line track running east-west (Winchester to Frankfort, Kentucky) through the Lexington-Fayette County area, not including branch lines or spurs which run off of the main line to serve certain Lexington customers such as Proctor & Gamble along East Third Street (see Figure 3.9). Lexington lies on the Hazard-Ravenna-Lexington-Frankfort-Louisville route, a route between eastern Kentucky and Louisville Kentucky on the Ohio River. CSX interchanges goods with the Norfolk Southern Railway to transport to, from, and through the Lexington MPO area. On an average day, CSX may have 6 to 12 trains delivering goods, returning empty cars, or traveling through the MPO area. On a busy day there may be over 15 trains.

The CSX Railroad has a main switching and freight classification yard in central Lexington on Buchanan Street just south of West Main Street. At this "Bulk Industrial Distribution System" (or BIDS) facility, CSX can "transload" from railcar to truck and vice versa to serve the Lexington area. Some CSX shipper and receiver customers in the area such as Lexmark International, Incorporated, are served conveniently by having facilities located contiguous to the CSX main line.

# **Norfolk Southern Corporation:**

Norfolk Southern Corporation, also a freight-only service. The company owns North American Van Lines, a trucking line. Norfolk Southern has approximately 30 miles of heavy main-line rail running north south (Georgetown to Danville Kentucky) through the Lexington-Jessamine MPO area. The Norfolk line through Lexington comes from Chattanooga and Knoxville and connects to Cincinnati. This branch line enables engines to travel west to serve customers located in Versailles, Kentucky, (Woodford County). Norfolk Southern carries a wide variety of goods. Some of the major commodities carried include forest products, chemicals (i.e., plastic and asphalt), cars, peanuts, liquor, and steel. On an average day, Norfolk Southern may have as many as 35 to 40 trains travel in, out, or through the MPO planning area

The company has switching yards in Lexington. It also serves customers in Nicholasville. In central Lexington, the yard is located off South Broadway between DeRoode Street and Angliana Avenue. Like CSX customers, many Norfolk Southern shippers and receivers in the area are conveniently served by having facilities located contiguous to the Norfolk Southern main line, such as Fort James-Dixie Northern (formerly Dixie Cup), Atlantis, Lexington Metal Recyclers, Gulf States and others.

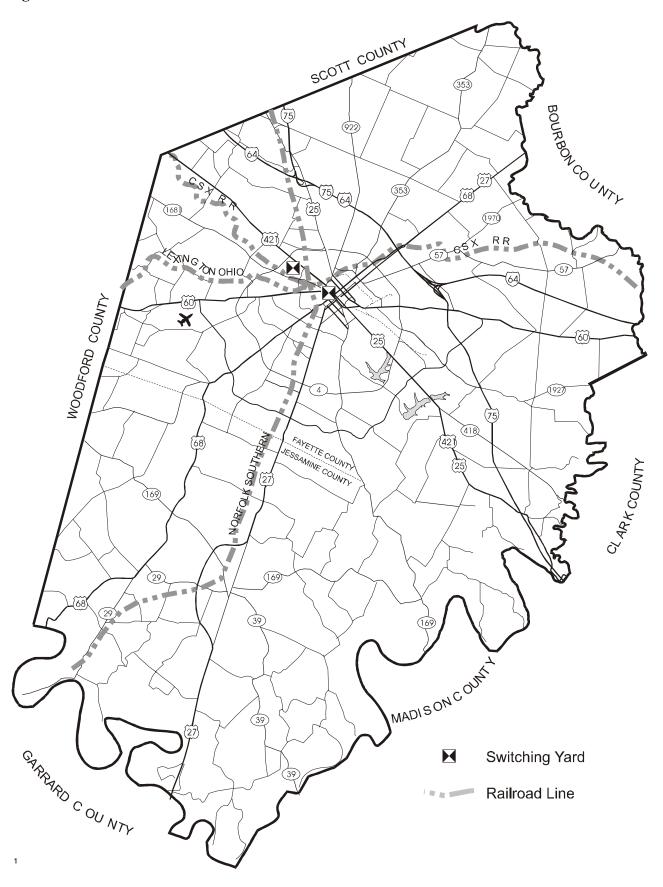
Norfolk Southern has rail terminals located just north and south of the Lexington in Georgetown and Danville, Kentucky. Terminals in Georgetown and Louisville, have full "intermodal facilities" to transfer double-stacked truck trailers from railcar to truck tractors and vice versa. The Georgetown facility, 20 miles to the north, serves the Lexington area extensively.

# Lexington and Ohio Railroad

The Lexington and Ohio operates fifteen miles of single-track rail between Lexington and Versailles. Its customers include Advance Drainage, World Color, and Woodford Feed in Versailles. In Lexington, customers include Pepsi Cola and Lee Brick and Block. The railroad started out moving 1300 cars in 1996 and has grown to over 1700 cars currently.

In 1979, the Lexington Fayette Urban County Government commissioned the firm of Wilbur Smith Associates to conduct a comprehensive *Trucking and Railroad Goods Movement Study* as an important part of its Transportation Planning Unified Work Program. This document contains considerable information on the area's truck and rail goods movement systems. The majority of the information in this report still holds true today.

Figure 3.9: RAILROADS AND SWITCHING YARDS



## AIR CARGO

Located in western Fayette County along Versailles Road and Man o' War Boulevard, Blue Grass Airport is one of the area's most significant intermodal transfer points (air-to-highway/highway-to-air). Air cargo at Blue Grass Airport is handled by both the airlines and independent cargo carriers, and consists of airfreight, air express and the United States mail. Air express and the mail are currently handled through a 14,000 square foot cargo building. Additional air express/freight is handled through separate facilities operated by Tex Sutton, Murphy Surf-Air and Delta. Current cargo building space contained in all four cargo buildings is 22,800 square feet.

Even though United States mail activity has continued to increase over the past several years, air express/freight has declined in Lexington as a result of the growth of airfreight hubs in Cincinnati, Louisville and Indianapolis. Many military operations involve the movement of freight. In 1999, there were 2,890 military operations at Blue Grass Airport. Operations numbers have fluctuated since 1988 with an average of 2,700 operations per year. In 2000, Blue Grass Airport transported 3.8 million pounds of mail and 956,000 pounds of airfreight.

### HAZARDOUS MATERIALS MOVEMENT

Our society depends on products manufactured from hazardous materials, from blue jeans to television sets to life-saving medicines. Because of the dependence on these products, their transportation has become an integral part of daily living.

There is a great deal of hazardous materials moved in/out and through the Lexington MPO planning area by air, rail, water, pipeline, and highway. The railroad industry moves more than 1.5 million carloads of hazardous materials every year. Safety has improved by way of innovative equipment design, education, training, information, emergency response, maintenance, and grade crossing improvements.

State and federal agencies regulate air, rail, water, pipeline, and highway carriers of hazardous materials. There are no local hazardous material regulations in the Lexington MPO area; however, the LFUCG Divisions of Fire, Police, and Environmental and Emergency Management are experienced, trained, and prepared to respond and resolve hazardous material incidents.

# **AVIATION**

Primarily the Lexington Area MPO deals with surface transportation planning. Therefore, the Lexington Area MPO has not directly participated in the aviation planning process for the Blue Grass Airport. However coordination of planning efforts occurs between aviation providers and the Lexington MPO via membership on the Transportation Technical Coordinating Committee.

The air service needs of Central Kentucky and a large portion of Eastern and Southern Kentucky are served by the Blue Grass Airport. These needs are met through a mixture of scheduled commercial air service, as well as general aviation service. Currently, there are six commercial airlines operating at the Bluegrass Airport,

- <u>Continental Express</u> provides daily non-stop flights connecting the Lexington to Continental's hubs in Cleveland, OH, Newark/New York and Houston, TX.
- <u>Delta Air Lines, Delta Connection</u> provides daily non-stop jet flights between Blue Grass Airport and its hubs in Atlanta, GA, Cincinnati, OH, Dallas, TX and New York, NY.
- Northwest Airlink provides daily non-stop flights to its hubs at Detroit. MI and Memphis, TN
- <u>United Express</u> provides daily non-stop jet flights to United Airlines' hub in Chicago, IL and connecting service to destinations worldwide.
- <u>US Airways Express</u> provides daily non-stop jet flights from Blue Grass Airport to its hubs in Pittsburgh, PA and Charlotte, NC

Figure 3.10 - Non-stop Cities June 2003



Source: Blue Grass Airport

According the Blue Grass Airport, passenger activity was 876,641 in 2001 and passenger activity increased to 961,750 in 2002. Commercial Flights offered from Blue Grass Airport increased from 86 to 96 from 2001 to 2002.

Total aircraft operations at Blue Grass Airport decreased from 90,422 to 88,964 in 2001 to 2002. This is a direct result of changes in the type of aircraft using the airport. Commercial airlines have introduced larger aircraft, particularly regional jet aircraft, to Lexington allowing for increased passenger activity with fewer total aircraft operations.

Air cargo at Blue Grass Airport is handled by both the airlines and independent cargo carriers, and consists of air freight, air express and the United States mail. Air express and the United States Postal Service are currently handled through a 14,000 square foot cargo building. Additional air express/freight is handled through separate facilities operated by Tex Sutton, Murphy Surf-Air and Delta. Current cargo building space contained in all four cargo buildings is 22,800 square feet. To make way for an expanded covered rental car facility the current air freight complex will be relocated and replaced with a new facility featuring roughly the same size and features of the existing site.

In 2002, there were 1,306 military, 50,551 general aviation and 37,107 commercial/air taxi operations conducted at the airport. Due to new regulations on the transport of U.S. mail on commercial aircraft the volume of mail handled at the airport has decreased from 2,354,829 lbs in 2001 to 1,012,179 lbs in 2002. In 2002, the commercial airlines at the airport handled 912,656 lbs of airfreight.

| Figure 3.11         | 2001          | 2002          |
|---------------------|---------------|---------------|
| Enplaned Passengers | 439,857       | 486,852       |
| Deplaned Passengers | 436,784       | 474,898       |
| Total Passengers    | 876,641       | 961,750       |
|                     |               |               |
| Total Operations    | 90,422        | 88,964        |
| Total Mail          | 2,354,829 lbs | 1,012,179 lbs |
| Total Freight       | 767,256 lbs   | 912,656 lbs   |

Source: Blue Grass Airport

# **Significant Events at Blue Grass Airport**

- November 2001: First airport in the nation to offer FREE wireless Internet access to the public. This project was developed to meet a growing demand for wireless access from the modern traveler, hi-tech companies moving to the area and the latest mobile computer and phone technology. The airport pursued this project to provide the Central Kentucky traveler with unparalleled convenience and access. Since the installation a number of other airports have installed wireless technology and the methods of providing wireless technology in small and medium airports has changed forever.
- December 2002: Blue Grass became one of only five airports in the nation to offer a seamless baggage screening and security technology out of sight of the public. The "In-Line" screening facility employs the latest security technology, allows federal agencies to save millions of dollars in personnel costs and provides the traveling public with a hassle-free travel experience. Blue Grass Airport is now considered a model airport for the implementation of security and safety programs in the US.
- 2002: Blue Grass Airport is one of the very few airports in the nation to add six new cities by five different airlines over the past two years. Despite an economic downturn, the War in Iraq, terrorist alerts and heightened security measures Lexington's airport's passenger activity grew by 10% in 2002 and is trending 20% higher in 2003.
- 2003: Blue Grass Airport has started the initial phases of a runway modification project that will enhance the safety areas on each end of the existing runway. This project will provide enhanced safety and will allow the airport to make modifications that do not provide significant negative impact on the neighbors near the airport. The project is estimated to cost \$35 million and will be complete by 2006.
- 2003: The airport started its Master Plan Update. This document, updated every 5-7 years, serves as the blueprint for airport development for the next 15-20 years. A number of public meetings and reviews are scheduled in association with this update.

Today, the airport is at 43 percent of its capacity for air traffic. According to the LPA group, in 2032 Blue Grass still would be at less than 80 percent capacity. When the airport does need to increase runway capacity, the preferred alternative would be to construct and lengthen the existing general aviation runway, which intersects the main runway, according to a plan presented to the public this past summer. Some of the changes proposed in the master plan are already in the works. A third security checkpoint, a third baggage carousel and six additional gates will be built in the next few years.

## TRANSIT SYSTEM

A good transit system is an essential and basic component to an urban area's transportation system. Without this vital component undesirable socioeconomic, environmental, and quality of life impacts will occur. The Transit Authority of the Lexington-Fayette Urban County Government (LexTran) provides public transportation in Lexington. In June 2003, the existing LexTran system focused on the transit center concept first recommended in the *Year 2000 Transportation Plan*. Ease of utilizing the LexTran system is facilitated by the downtown transit center, while suburban transfer points improve access to public transportation in outlying areas. The radial nature of the transit system makes the Central Business District (CBD) an ideal place to transfer between routes. The Downtown Transit Center has been in operation since July 1, 1992.

In the past decade, the LexTran system has seen a series of significant improvements. The first steps made to revitalize LexTran were increased frequency of service and the linkage of paired routes. The majority of routes were also aligned to serve the University of Kentucky. As funds became available, extended hours and days of service were implemented. In addition, the fixed route system was enhanced by the implementation of night service, as well as Saturday, and Sunday service. Sunday service was implemented in July, 2000.

Two routes that were started in recent years were short-lived additions to the system. The Old Frankfort Pike Route was a main line route added to serve the warehousing and industrial area along Old Frankfort Pike, as well as, the new Detention Center. This was operated with less frequency than the other routes. In addition, there was the Southside Connector, which linked the main line routes in the southern suburbs of Fayette County. Both routes were discontinued by the end of 2003, due to fiscal constraints and low ridership.

The LexTran system currently operates from 5:30 a.m. to 12:30 a.m. on Monday through Friday, and 5:30 a.m. to 10:30 p.m. on weekends. As the year 2004 began, the transit system included eight main line routes and four express routes to the University of Kentucky campus. Two of these UK oriented routes serve the area formerly served by the Southside Connector. The system serves the Urban Service Area (seen in white on Figure 3.5) very well by offering excellent coverage within a half-mile radius of its routes (seen in grey on Figure 3.5).

During the school year, LexTran also operates a shuttle service on the University of Kentucky campus. Fall semester of 2002 saw the introduction of the "Go Free" program. This program, funded through a Congestion Mitigation/ Air Quality grant (CMAQ), offers free transit service to all students, faculty and staff at UK and the Lexington Community College. As part of this CMAQ project, the four UK express routes were implemented. LexTran provides paratransit service through a contract with the American Red Cross (detailed under the Paratransit section).

The FY 2004 year began with the existing LexTran system in crisis. Continued loss of funding in recent years had a negative impact on the LexTran fleet. Because of maintenance problems, LexTran was forced to cut back on service hours and frequency of service. For eleven weeks (from September 18, 2003 to November 28, 2003), the peak hour service was reduced from 30-minute to hourly service. In addition, buses were leased from the transit systems in Northern Kentucky (T.A.N.K.) and Louisville (T.A.R.C.) in order to keep LexTran operational. Peak hour service frequency of 30-minutes was restored on November 28th, in time for the busy holiday shopping season.

Immediate elimination of the Southside Connector and the Old Frankfort Route had been considered by the LexTran Board as emergency measures; however, an additional \$372,000 from LFUCG enabled LexTran to maintain this service though the remainder of 2003. Changes were made, so that two new UK routes replaced the Southside Connector, thus meeting the CMAQ requirements for local match on the UK Transit Network.

Figure 3.12 - LEXTRAN FIXED ROUTE & SERVICE AREA MAP

The LexTran fleet received the first of 15 new buses in November 2003. This bus acquisition was possible through a Section 5307 grant of \$2.7 million that enabled LexTran to purchase 10 buses, and a Section 5309 grant of \$3.5 million, which will purchase the remaining five buses, and provide the funding for additional vehicles in the future. With the 15 new buses in place by the end of February 2004, 31 buses in the LexTran fleet will now be five years old or newer. While this fleet improvement is an important start, LexTran continues to seek ways to ensure the viability of the bus fleet.

During the crisis period, a local mediator with Action Speaks, worked to improve labor-management problems within LexTran. A new management firm began to oversee LexTran operations, beginning on November 1, 2003.

#### **CHAPTER 3 – EXISTING TRANSPORTATION SYSTEM**

The firm, Professional Transit Management LTD, (PMT) is based in Loveland, OH. The management contract is for one year, with five years renewable.

The LexTran system has historically served the community in a radial fashion, emanating from the central business district of Lexington. The radial routes generally follow the arterial streets leading into the outlying suburban areas. LexTran operates three levels of service each weekday; peak period, mid-day, and night service. While LexTran has expanded service in recent years through the reintroduction of night and weekend service, peak hour service has remained the Transit Authority's priority.

Peak hour service provides for the period of greatest demand. Peak hour trips are generally targeted toward identifiable and usually concentrated employment areas in the community. The downtown is recognized as a major employment center and is expected to continue this vital role in the future. The University of Kentucky, along with its Medical Center, is the largest employer in Fayette County, and system improvements have reflected the university's vital role. LexTran's radial routes serve the CBD adequately and provide an important alternative to private auto travel for the peak hour work trip.

Peak period LexTran service coincides with peak traffic patterns, running from 6:00 to 9:00 a.m. and from 4:30 to 6:00 p.m. Mid-day or base period service is operated between the morning and evening peak service from 9:00 a.m. to 4:30 p.m. At the end of 2003, LexTran night service was available on all fixed routes until 12:40 a.m. on weekdays and 10 p.m. on weekends. The current system utilizes 38 vehicles during peak hour service, while off peak utilizes 20 vehicles.

The frequency of service (often referred to as service headway) is the time interval between successive buses on a route. Generally, the greater the ridership per hour on a route, the more frequent the service, i.e., the shorter the headway. Recent service improvements have greatly improved service frequency, so that current peak hour service is offered every 30 minutes on all routes, while mid-day service and weekend service operate on 60-minute headways.

For several years, the existing LexTran system has focused on main line routes providing direct access to downtown. With the exception of the Hamburg and the new UK Express routes, these routes are paired, with the linkage allowing improved route connections.

In addition to the fixed route system, LexTran operates a route on the UK campus during the school year. This route is subsidized by the university and operated free of charge to the university community and the general public. In FY 2003 this subsidized service was provided as part of the UK Transit Network CMAQ grant. The UK shuttle subsidy of \$397,812 provided the grant local match. The LexTran fixed route system in place for FY 2004 is shown in Illustration 2 while the 1/4-mile service area is depicted in Illustration 3.

Regular passenger fare for LexTran was raised from 80 cents to \$1.00, effective July 1, 2001. This was the first fare increase since 1992. In changing the fare structure the WHEELS fare remained the same. Discounted passes are available, and reduced fares are offered to the elderly, disabled and student populations. In recent years, LexTran has worked hard to increase ridership, and has focused many efforts on the University population. In FY 2003, LexTran's ridership was 3.9 million annual passenger trips.

Recognizing the importance of the University of Kentucky, as a transit attraction, as well as, transit generator, LexTran has made significant efforts to serve this need. All but three of the LexTran routes provide direct service to the UK campus. Using a FY 2003 CMAQ grant, LexTran was also able to provide free service on all routes to the UK and Lexington Community College community, including all students, faculty and staff. This is in addition to the on-campus shuttle route, which was rolled into the campus transit network. This 3-year demonstration grant is also being used to develop four new routes that will serve concentrations of the university population.

Other improvements to the LexTran system have included bicycle racks on all buses, thus promoting a truly intermodal transportation system. In FY 2003, 20 bus shelters were installed along routes throughout the community. Bus shelter installation will continue in 2004, with 30 more planned. New bus stop signs are being installed to better

identify those locations. In order to make LexTran data collection more efficient, LexTran began to place electronic fare boxes on all buses in 2003.

Currently, to address budget shortfalls, LexTran is cutting service. Also, LexTran is in the process of a strategic planning process that should be completed by 2004. This process will help determine the community visions for the Lexington transit system in the future and how to achieve it. The MPO is currently and will continue to work closely with LexTran to support, promote, and improve public transportation within the MPO area.

# **CAMPUS AREA TRANSIT SYSTEM (CATS)**

The Campus Area Transit System (CATS) fleet consists of twelve buses that support four routes (see Figure 3.13) serving the University of Kentucky campus core during the fall and spring semesters as well as the Medical Center EG Yellow Shuttle, which operates year-round. These buses are small and maneuverable allowing for more reliable service to the campus interior. During the summer months, Transportation Services operates a special summer route that provides service to the entire campus.

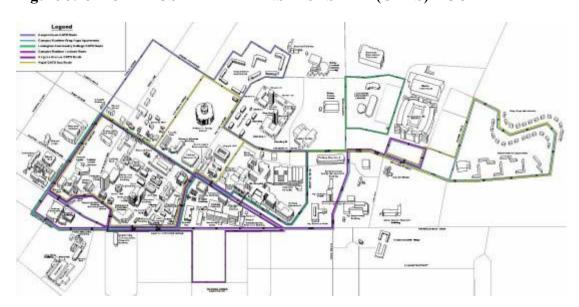


Figure 3.13 - CAMPUS AREA TRANSIT SYSTEM (CATS) ROUTE MAP

Transportation to the campus periphery is supplied through an agreement with the Lexington city transit system (LexTran). The buses are city coaches, which are larger than the CATS fleet buses, and are therefore able to transport a larger volume of people to locations along the campus perimeter. These routes operate between 7:00 a.m. and 6:15 p.m. during the fall and spring semesters with primary service to Commonwealth Stadium, UK Medical Center, Washington Avenue, Administration Drive, and Taylor/Dickey buildings.

# **PARATRANSIT**

The Lexington Transit Authority contracts with the American Red Cross to provide the LexTran WHEELS transportation service for the disabled community. This is the approved paratransit service in accordance with the Americans with Disabilities Act of 1990.

The WHEELS operation currently covers all of Fayette County with one day prescheduled service, and demand-responsive door-to-door service. This exceeds the ADA requirement for a 3/4 mile service area around the fixed

route system. WHEELS uses 23 wheelchair lift equipped vehicles to provide this paratransit service. All vehicles have two-way radios to keep in touch with the dispatcher.

Service hours for WHEELS correspond to LexTran's operating hours, with service from 6:00 a.m. to 1:00 a.m. daily. Trips are routinely scheduled a day in advance, while return trips are arranged on an on-call basis. Since September 1992, the paratransit fare has been \$1.60 per one-way trip. This remained the same when the LexTran system had a fare increase in 2001. In addition, all LexTran buses are wheelchair accessible increasing the transportation alternatives for the disabled.

In FY 2003 the total ridership for the LexTran WHEELS service averaged approximately 8,700 trips a month, with approximately 53,000 miles of service monthly. Work trips account for 32% of the WHEELS trips, while 28% are medical, 20% for food/shopping and 5% of the trips are for education purposes. The remaining 15% are for other purposes. Approximately 35% of the WHEELS passengers have a mobility impairment.

The *ADA Paratransit Plan* provides guidance for the LTA contracted paratransit service and has been approved by the Federal Transit Administration. The last annual plan update required by the FTA was submitted in Jan., 1996.

# **MOBILITY COORDINATION**

The Lexington Area Metropolitan Planning Organization, (MPO), established a Mobility Office in FY 1997 to serve as the central point of contact for all inquiries concerning transportation providers and ride matching. The office coordinates passenger trip requests, the LexVan program, and promotes alternative transportation service. An important responsibility of the Mobility Office is the coordination of activities with the Air Quality (air pollution reduction) program.

The alternative transportation services of the Mobility Office are available to any resident of the Lexington Area MPO. Also eligible is anyone that lives in the 17-county Bluegrass area and works in Fayette County. Air Quality program information is also available through the Mobility Office.

The LexVan Program was transferred from LexTran to the Mobility Office in June of 2003. LexTran notified the LFUCG that the program would be eliminated due to insurance issues if it was kept within LexTran after their insurance renewal date. This was not due to any problems within the program, but rather a desire by the insurance company to reduce potential risk.

Since the transfer of the program, the Mobility Office has handled all administrative duties and has worked with LFUCG Divisions, such as Risk Management, Fleet Services, and Revenue to keep the program running smoothly and efficiently.

The Mobility Office and MPO staffs have implemented a number of public transportation, ridesharing and air quality (air pollution reduction) programs and projects. These include:

- Employer Transportation Programs The staff worked with large employers to produce site specific ridesharing/Mobility Office surveys. The site-specific surveys are distributed to employees and completed surveys are returned to the Mobility Office for processing.
- Ride Matching Services A computer based matching system, Geo Match, is used for people wishing to carpool or vanpool. Once a match is found, a letter of explanation, a listing of the people on the match list, and a map showing the locations of the carpool matches are mailed.
- LexVan (vanpool) Transportation System Over 127,000 trips are provided per year with the average round trip of 50 miles. Millions of gallons of gasoline have been saved and millions of pounds of pollution have been reduced during the course of the LexVan program. Seventeen to twenty LexVans are in service at any given time with at least 3 additional backup vans.

- Low Cost Downtown Carpool Parking Spaces in the Vine St. Transit Center Parking Garage are available at ½ price for carpools or vanpools. Downtown Lexington employers are contacted and asked to distribute carpool parking brochures/surveys to employees.
- Air Quality Advisory Committee. The committee is composed of local, state and federal government representatives and people from the private sector involved with air quality issues. The primary goal of the committee is to improve the community's health, quality of life and livability through the reduction of air pollution. The committee meets monthly to review Mobility Office/Air Quality programs and projects.
- **General Public Information Calls** The Mobility Office staff receives many phone calls each month for all types of transportation and general government information. Computer ridesharing services are provided over the phone.
- Mobility Office Web Site & Air Quality Web Page The Mobility Office and MPO staff updates the current air quality index readings and other information daily during Ozone season on the Air Quality web page (www.lfucg.com/ozone). The Mobility Office web site (www.lfucg.com/mobility) has an overview of all programs and services provided by the Mobility Office.
- Ozone Alert/Free Transit Program operates each year during the Ozone season. Staff e-mails daily Air Quality Index readings to all media outlets, and updates the Air Quality web page. The reading determines if an Ozone Alert day needs to be called for the next day. During Alert Days, people are asked to reduce activities that affect the air quality.
- Mobility Office Marketing Campaign uses radio and print advertising to promote Carpooling, Vanpooling,
  Telecommuting, the Ozone Alert/Free Transit Program, low cost parking downtown at the Transit Center
  garage for carpools, and the 233-POOL number for all transportation/air quality information.

The Mobility Office and MPO staffs have developed many Congestion Mitigation Air Quality (CMAQ) Projects over the years. These include:

- LexTran Sunday Service
- LexTran Bike & Ride
- LexTran 25 Cent Summer Fare
- LexTran Free UK Transit
- Gas cap Replacement Program
- Bicycle/Pedestrian Coordinator
- Mobility Office Road Signs
- Ozone Forecasting Model for the Lexington MPO
- New Passenger Vans for the LexVan Program

The Mobility Office and the MPO will continue to apply for CMAQ Projects to better Air Quality and Mobility in the region.

## **BICYCLING & BICYCLE SYSTEM**

Bicycling is permitted on all roadways in the MPO region, except Interstates and limited access highways. Throughout the year, bicyclists of all ages and experience levels use area roadways to commute to school, work and other destinations, as well as for exercise and recreation. National studies indicate that commuter and utilitarian bicycle trips are generally to destinations within three to five miles. In the MPO region, these trips primarily occur on the existing street system, without the benefit of facilities designated exclusively for bicycles. In many cases, existing roadways do not need specific treatments to safely accommodate bicycle traffic. In other cases, improvements will be necessary to make bicycle travel a safe and pleasant experience for people of all experience levels and to further encourage bicycling as a viable alternative to the automobile.

The bicycle network consists of on-road facilities and off-road facilities. On-road facilities include **shared roadways** (paved shoulders, wide curb lanes, and/or no bikeway designation); **signed shared roadways** (bike route designations); and **bike lanes.** Because nearly any destination can be reached using the existing road network, on-road facilities are critical components of bicycle systems. **Shared use paths** are off-road facilities that can improve the connectivity of the bicycle network by supplementing missing or dangerous gaps in on-road facilities. They also offer a riding experience away from vehicular traffic, which is often preferred by less experienced cyclists.

In the MPO area, designated on-road and off-road bicycle facilities are limited and discontinuous. In Lexington, there are 6.4 miles of bicycle lanes, 11.6 miles of paved shoulders, 7.0 miles of shared use paths, 0.4 miles of wide curb lanes, and one 4.0 mile signed bicycle route. There are currently no bicycle lanes in Jessamine County.

The construction of bicycle facilities are often costly projects that involve widening local roadways. As a result, many bicycle improvements take place during new roadway construction, reconstruction and repaving projects. Since the adoption of 2025 Long Range Transportation Plan, bicycle related improvements have taken place on 9.5 miles of regional roadways. Despite the limited number of existing facilities in the area, there are many improvements for which funding has been programmed and construction is scheduled to begin within the next six years. Existing and committed facilities in Lexington-Fayette County, including their location, facility type and length, are shown in Figure 3.14 and Figure 3.15.

Figure 3.14 - EXISTING AND PROGRAMMED BICYCLE FACILITIES

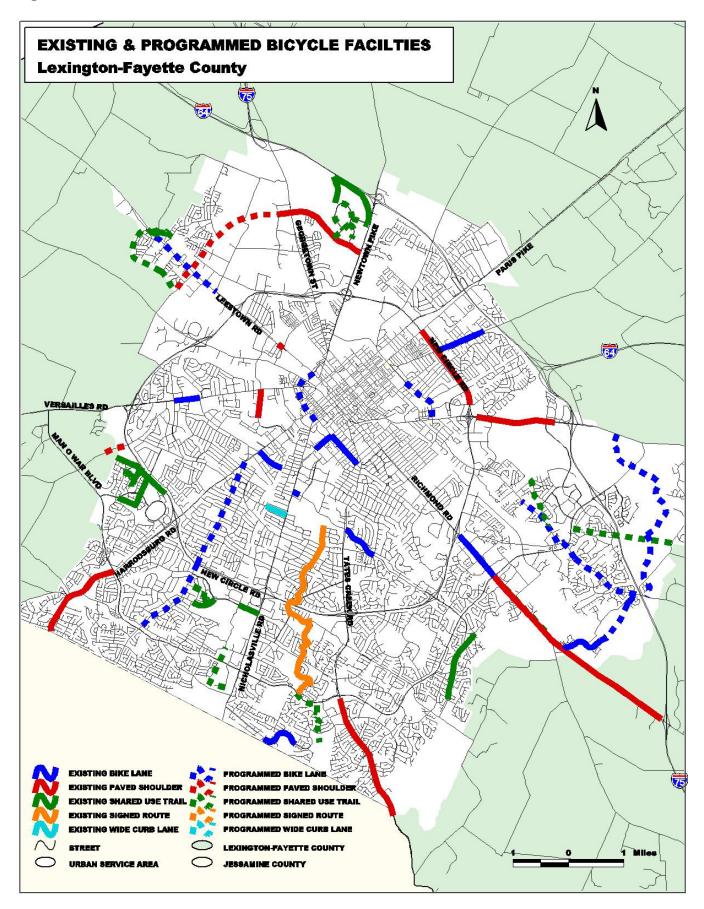


Figure 3.15 - EXISTING AND PROGRAMMED FACILITIES

|                 | Existing                    | Mileage    | Programmed                    | Mileage    |
|-----------------|-----------------------------|------------|-------------------------------|------------|
| Bike Lane       | Bryan Station Rd            | 0.9        | Leestown Rd                   | 1.5        |
|                 | Euclid Ave                  | 0.7        | Clays Mill Rd                 | 3.6        |
|                 | Waller Ave                  | 0.5        | Rose St/Ave Champions         | 0.5        |
|                 | Alumni Dr<br>Rose St        | 0.7<br>0.3 | Alumni Dr<br>Loudon Ave       | 0.2<br>0.9 |
|                 | Southpoint Dr               | 0.3        | Liberty Rd/Todds Rd           | 3.0        |
|                 | Versailles Rd               | 0.6        | Newtown Pike                  | 3.0<br>1.5 |
|                 | Hays Blvd                   | 1.0        | Mt. Tabor                     | 0.2        |
|                 | Richmond Rd                 | 1.0        | New Development               | 0.2        |
|                 | Menmona Na                  | 1.0        | Park Rd                       | 2.5        |
|                 |                             |            | Polo Club Blvd                | 1.2        |
|                 |                             |            | Hays Blvd                     | 0.8        |
|                 |                             | 6.4        | Tiayo Biva                    | 15.9       |
| Paved Shoulder  | Citation Blvd               | 1.7        | Harrodsburg Rd (under const.) | 1.7        |
| i avea onoulaei | New Circle Rd               | 1.6        | Citation Blvd (phase II)      | 2.6        |
|                 | Winchester Rd               | 1.4        | Parkers Mill Rd               | 0.4        |
|                 | Richmond Rd                 | 4.0        | Leestown Rd (bridge)          | 0.2        |
|                 | Tates Creek Rd              | 2.4        |                               |            |
|                 | Red Mile Rd                 | 0.5        |                               |            |
|                 |                             | 11.6       |                               | 4.9        |
| Wide Curb Lane  | Rosemont Garden             | 0.4        |                               |            |
|                 |                             | 0.4        |                               |            |
| Signed Route    | Bellefonte Dr               | 4.0        |                               |            |
|                 |                             | 4.0        |                               |            |
| Shared Use Path | Squires Rd                  | 1.3        | Coldstream Campus             | 1.8        |
|                 | Masterson Station           | 0.5        | South Elkhorn Trail           | 1.0        |
|                 | W Reynolds Rd               | 0.3        | Richmond Road                 | 1.1        |
|                 | NDC (Vincent Way)           | 0.1        | Brighton East Rail Trail      | 1.8        |
|                 | NDC (Keithshire Way)        | 0.4        | Town Branch Trail             | 1.8        |
|                 | NDC (Dorchester)            | 0.3        | West Hickman Trail            | 1.3        |
|                 | Beaumont<br>Coldstream Park | 2.5<br>1.6 | Liberty Park Trail            | 1.0        |
|                 |                             | 7.0        |                               | 9.8        |
| _               |                             |            |                               |            |
| To              | tal Existing Facilties      | 29.4       | Total Committed Facilities    | 30.6       |

Bicyclists are observed traveling in the MPO region on all types of roads: local, collector, minor arterials, principal arterials and rural roads. Local streets typically do not need special improvements to safely accommodate bicycle traffic. Only 2.5% of collector streets, 4.6% of minor arterials and 10.4% of principal arterials in Lexington-Fayette County have bike lanes, wide curb lanes or paved shoulders.

On principal arterials, bicycling activity is influenced by factors such as travel distance, personal experience operating in traffic, availability of alternate routes and the presence of extra roadway width. Although 10.4% of principal arterials in Lexington-Fayette County have bicycle facilities, 95% of those are paved shoulders located outside of New Circle Road. There are two principal arterials, Versailles Road and Richmond Road, that have bicycle lanes located along some portion of the roadway.

Inside New Circle Road, the greatest number of bicycle facilities are found on minor arterials. Minor arterials are important in terms of commuter and utilitarian bicycle trips given that they offer more direct routes than collectors and carry less traffic than principal arterials. Minor arterials may also act as boundaries to residential areas and are therefore critical bicycling links between neighborhoods and community shopping centers, strip commercial areas, employment centers, recreation areas and neighborhoods.

Rural roads in Lexington-Fayette and Jessamine County, are shared roadways that are important components of the regional bicycle network. These narrow roadways wind across the rolling Bluegrass landscape. Outside the urbanized areas, nearly all rural roads in the region do not have paved shoulders or adequate lane widths for cyclists and motorists to pass each other safely. There are also a number of sight distance problems. As the number of area employees commuting to and from surrounding counties continues to rise, improvements to rural roadways are likely to occur. The benefits of accommodating bicyclists during these roadway improvements should be evaluated.

## BICYCLE SUITABILITY OF OUR STREETS

Bicycle travel continues to occur on area roadways, whether specific bicycle improvements have been made or not. It is therefore important to evaluate the suitability of those roadways for bicycling under existing conditions. In 1999-2000, the Bicycle Pedestrian Advisory Committee (BPAC) evaluated the bicycle level of service of 213 miles of collectors, minor arterials and principal arterials within the urbanized area of Lexington-Fayette County.

The BPAC utilized the *Bicycle Level of Service (Bicycle LOS) Model*, developed by Bruce Landis of SCI, as the foundation of the evaluation. The Model uses the same measurable traffic and roadway factors that transportation planners and traffic engineers use for other travel modes, including roadway width, striping treatments, traffic volumes, pavement surface conditions, motor vehicle speeds, vehicle types, and on-street parking to determine the bicycle "compatibility" of the roadway. As expected, the initial evaluation of the Lexington urban area showed the network provides somewhat poor conditions for bicycling with an average a level of service grade "C" and "D" on a scale of "A" through "F". Figure 3.16 shows the level of service distribution within the study network.

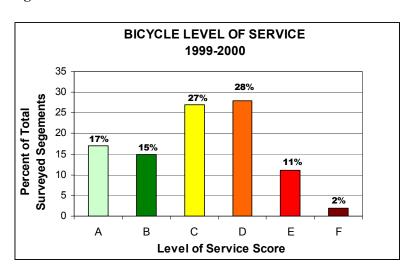


Figure 3.16 - BICYCLE LEVEL OF SERVICE DISTRIBUTION

Figure 3.17 below shows the distribution of the level of service grades based on roadway classification. In Lexington-Fayette County, collector streets received the greatest number of A, B and C ratings, minor arterials received the greatest number of E and F ratings.

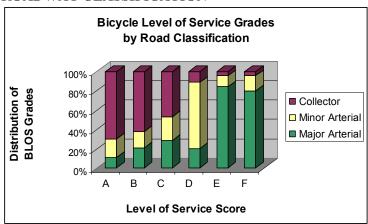


Figure 3.17 - BICYLE LEVEL OF SERVICE GRADE DISTRIBUTION BY ROADWAY CLASSIFICATION

The initial suitability study has provided a baseline for which the MPO can gauge bicycle system improvements. However, because roadway conditions have changed since 2000, the BPAC is in the process of updating the level of service data for roadways within the urbanized portion of Lexington-Fayette County. The BPAC continues to encourage and seek funding for the evaluation of bicycle suitability in other geographic areas of the Lexington Area MPO jurisdiction, including Nicholasville, Wilmore, and the rural areas of Fayette and Jessamine Counties.

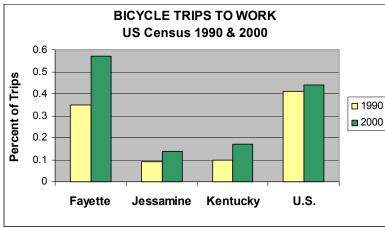
Bicycle suitability ratings will continue to be used to:

- distribute information to the cycling community and public at-large
- monitor bicycling conditions and the benefit of bicycle improvements
- evaluate proposed transportation projects for bicycle functionality
- select projects for inclusion in the Long Range Transportation Plan and the Transportation Improvement Program
- prioritize projects for grant applications
- identify connectivity gaps within the off-road greenway system

### **BICYCLE TRIPS TO WORK**

In 1990, the U.S. Census Bureau began collecting data on the number of persons who commute to work by bicycle. Since then, there has been an increase in bike-to-work rates at both the local and national level. Figure 3.18 compares the Lexington-Fayette and Jessamine County rates to both the state and national levels. The Lexington area rate has increased significantly more than the state and national levels. While increased bike-to-work rates are encouraging, additional data on the number of bicycle trips to other destinations is not available. However, given the increasing bicycle commuter trends, it follows that improving the general bicycle-riding environment could further spur an increase in the number of commuting and non-commuting bicycle trips.

**Figure 3.18** 



# **BICYCLE AMENITIES**

The Lexington Transit Authority obtained CMAQ funding to purchase and install bicycle racks on all buses serving the Lexington area. The "Bike and Ride" program combines environmentally-friendly bicycle travel with public transit to expand the range of destinations that can be reached by each travel mode. In addition to the racks on buses, bicycle parking has been installed throughout the Lexington area. During 2003, over 200 bicycle racks were installed at locations such as community centers, libraries, churches, parks, government buildings and local businesses. An additional 50 racks are scheduled for installation during 2004.

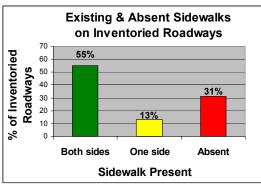
## **BICYCLE PROGRAM**

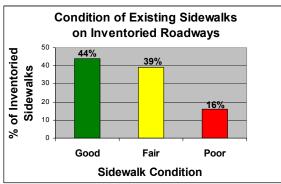
The Lexington Fayette Urban County Government recently established a Bicycle & Pedestrian Coordinator position to advocate for and address bicycle and pedestrian issues in the Lexington area. MPO staff and BPAC members continue to work to educate local residents about bicycling and bicycle safety by maintaining a website and distributing information to local community centers, to area libraries and at community events. They have also worked to encourage cycling in the region by conducting bike rallies and promoting bike-to-work days. The staff has also begun compiling local bicycle and pedestrian crash data.

#### PEDESTRIAN SYSTEM

During 2003, the Lexington-Fayette Urban County Government began conducting a pedestrian facility inventory on roadways within the urbanized portion of Fayette County. Special attention was paid to areas surrounding public schools, universities and downtown. To date, the location and condition of sidewalks have been recorded for 488 miles, or nearly 48 percent, of streets found within the urban area (excluding limited access highways and Interstates). Figure 3.19 shows the percentage of those streets where sidewalks are absent, located on both sides, or one side of the street. Figure 3.20 shows what percentage of those sidewalks are in good, fair or poor condition. A "good" rating indicates that the sidewalks are structurally sound. Sidewalks in fair condition show signs of deterioration and will probably need to be replaced within five years. Sidewalks in poor condition are in immediate need of repair due to sinking, heaving, cracking or the presence of other tripping hazards.

Figures 3.19 & 3.20 - LOCATION AND CONDITION OF EXISTING SIDEWALKS FOR INVENTORIED ROADWAYS IN LEXINGTON FAYETTE COUNTY





Inventories are also being completed at intersections to record the location of crosswalks and other pedestrian features such as approaching sidewalks, curb ramps, pedestrian signals and signage. Nearly 1600 intersections have been surveyed. Of those intersections, 73% have sidewalks located along all roadways approaching the intersection. Of the intersections with sidewalks, only 25% have curb ramps for the disabled at each crossing. Seventy-three percent of intersections with traffic signals have at least one crosswalk, while 57% percent of those signalized intersections (with crosswalks) have pedestrian "walk" signals.

A detailed description of pedestrian facilities in Nicholasville and Wilmore is not currently available. We do not expect to see sidewalks in the rural portions of Jessamine and Lexington-Fayette County, however, paved or grass shoulders can greatly increase safety for pedestrian walking along the roadway. Paved shoulders and shared use path facilities, used by both pedestrians and cyclists, are inventoried in the bicycle section of this chapter.

The information collected during the pedestrian facility inventory has provided baseline data to gauge the condition of facilities in the Lexington area. Once system deficiencies have been further evaluated, including the lack of ADA compliant sidewalks and curb ramps, cost estimates for needed improvements can be calculated. Gaps in connectivity can be identified and used to prioritize projects for funding and for grant application submittals. The data will also help the LFUCG implement a Safe Routes to School program to improve pedestrian infrastructure surrounding public schools.

## WALKING TRIPS TO WORK

U.S. Census data from 1990 and 2000 indicates that there has been a decline in the number of people who walk to work in both Lexington-Fayette and Jessamine County. State and national walk-to-work and walk-to-school rates have also declined over the past several decades. At the national level, there is currently research underway to examine the possible implications of reduced walking trips in relation to the growing number of overweight Americans. Researches are also examining how pedestrian needs can be better addressed in the transportation decision-making process. The MPO began addressing the issue in 2004 by working with the National Center for Bicycling and Walking to examine pedestrian issues in the MPO region and to identify existing barriers to walking and undesirable walking environments that may discourage walking.

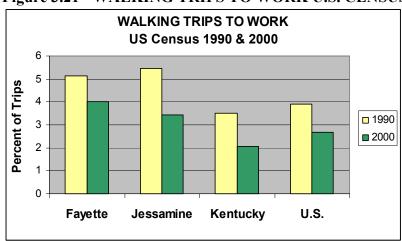


Figure 3.21 - WALKING TRIPS TO WORK U.S. CENSUS 1990 & 2000

# **CHAPTER 4**

# PLAN DEVELOPMENT

### SOCIOECONOMIC DATA PROJECTIONS

### INTRODUCTION

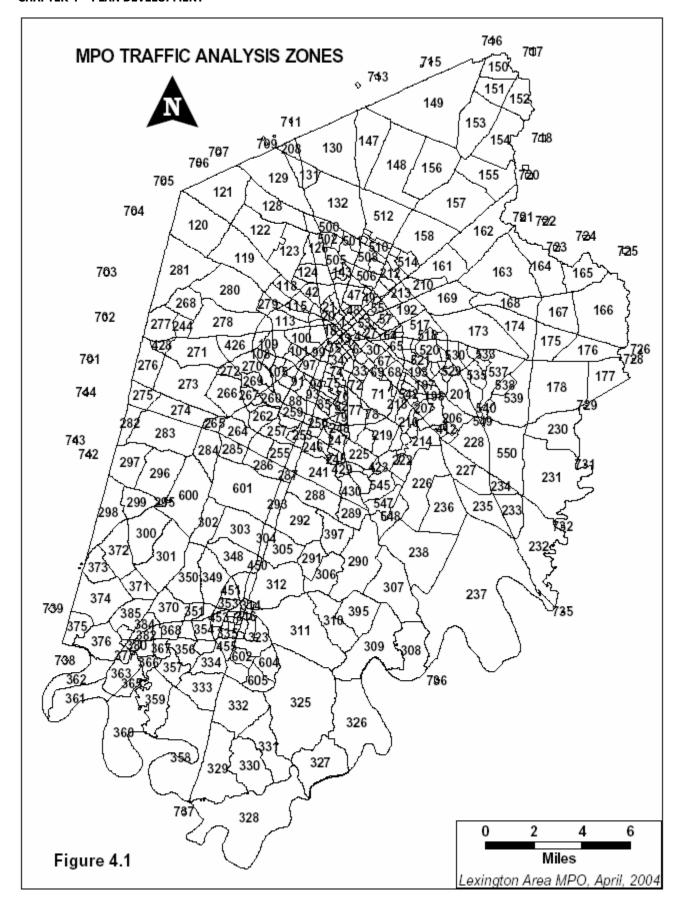
An essential component in the development of the Lexington Area TransCAD Travel Demand Model involves the preparation of a geographic component. The geographic component of the travel demand model contains the existing and forecasted socioeconomic databases by geographic sub-area that are translated into travel trips and patterns. The independent socioeconomic variables used in the generation of trips by the travel demand model include household population, the number of households, vehicle ownership per household, workers per household, household mean income, employment (total as well as the ten business sectors – agriculture, mining, construction, manufacturing, transportation/communication/public utilities, retail, wholesale, finance/insurance/real estate, services and government), school enrollment (college and vocational versus primary and secondary), and students per household.

This chapter covers: (1) the socioeconomic forecasts serving as control totals for existing (year 2000) and future (year 2030) databases, (2) the creation of the socioeconomic database for the base year of 2000 by Travel Analysis Zones (TAZs), and (3) the allocation of future growth to the TAZs establishing the socioeconomic database for the future year of 2030. The Travel Demand Model covers all of Fayette and Jessamine Counties to address (1) travel within the Lexington Area and (2) travel within and adjacent to the existing and future Lexington Urbanized Area. Figure 4.1 shows the Lexington Area Travel Demand Model Traffic Zones.

Projections are based upon the land use contained in the following documents:

- 1. 2001 Comprehensive Plan, Lexington-Fayette Urban County, Kentucky,
- 2. 2002 Comprehensive Plan, Nicholasville, Kentucky,
- 3. 1996 Comprehensive Plan, Jessamine County and Wilmore, Kentucky

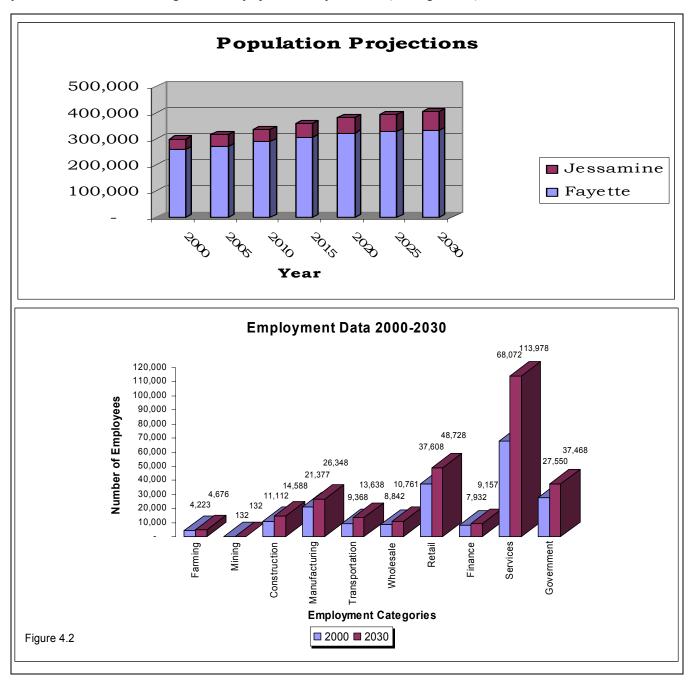
In some cases, the land use was based upon subdivision information as approved by the Planning Commissions.



### **PURPOSE**

Existing (year 2000 & 2004) and forecasted (years 2010, 2015, 2020, 2030) socioeconomic information by Travel Analysis Zones (TAZs) are inputs into the trip generation module of the travel demand model to establish the trips generated and attracted to each TAZ reflecting its unique mixture and magnitude of land use activities. An integrated set of forecasts prepared for each county using statistical procedures for the socioeconomic variables. Resident labor force projections to the year 2030 drive the forecast of population, households, median household income, and personal vehicles. Retail and non-retail employment projections are driven by past local trends as well as statewide and national trends in the major industry groups.

In Fayette County, the total population is projected to increase from 260,512 persons in the year 2000 to 333,000 persons in the year 2030. The total population of Jessamine County is to increase from 39,041 in the year 2000 to 70,550 persons in the year 2030. Total employment in Fayette County is forecasted to increase from 182,851 "wage and salary" (non-farm jobs less proprietorships) in the year 2000 to 253,043 "wage and salary" in the year 2030. Total employment in Jessamine County is forecasted to increase to 21,755 "wage and salary" jobs in the year 2030 from 11,715 "wage and salary" jobs in the year 2000 (see Figure 4.2).



### RECOMMENDED FORECASTS

Countywide control totals of socioeconomic variables were forecasted in five-year increments to the year 2030 for Fayette and Jessamine counties in order to serve as a basis for developing projections for the individual Travel Analysis Zone (TAZs). The following two-county area forecasts are recommended for use in the allocation of trip generation variables for the Lexington Area TransCAD Model Update:

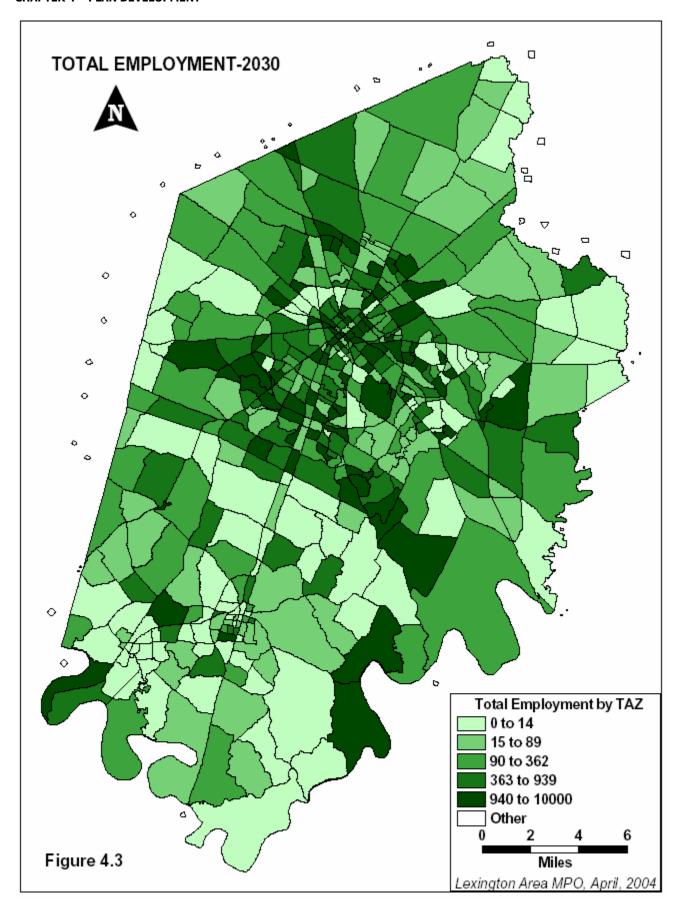
The labor force projection for the Lexington area is 234,205 workers in the year 2030, an increase of 66,260 workers (39.5%) from the Kentucky Cabinet for Economic Development (KCED) estimate of 167,945 laborers in the year 2000.

Based on the assumption that the labor force participation rate will follow the national trend (which is to increase until 2007 when it will begin to decline) in the Lexington area, the "recommended" population forecast for the two-county Lexington area is 403,550 persons for the year 2030, an increase of 124,481 persons (41.6%) from the 2000 Census count of 299,553. The 'recommended' forecasts agree very well with both Kentucky State Data Center and Woods & Poole Economics projections, but are significantly higher than the population projections included in the Year 2025 Transportation Plan.

With the "recommended" population projection and the declining household size projection, the corresponding median household income for the Lexington area is \$44,669 in the year 2030 (in constant year 2000 dollars) up from the most recent estimate of \$41,846 in the year 2000 (in constant year 2000 dollars).

The personal vehicle forecast for the year 2030 is 327,039, up from 213,518 vehicles in the year 2000. This increase in personal vehicles registered in the Lexington area also reflects an increase in the ratio of vehicles-perhousehold consistent with the national trend due to smaller households.

Based on the best employment projection regression equations, the forecasted employment by place of work for the Lexington area in the year 2030 is 274,798 "wage and salary" (non-farm jobs excluding proprietorships). This is an increase of 80,232 "wage and salary" jobs (41.2%) over 194,566 jobs in the year 2000. As was the case with the population projections, this forecast is higher than the employment forecast included in the Year 2025 Transportation Plan. For the year 2025 the forecast of 244,261 "wage and salary" non-farm jobs (excluding proprietorships) from the "recommended" series is 11.7% higher than the forecast of 218,662 "wage and salary" jobs, which was included in the Year 2025 Transportation Plan. However, this year 2025 forecast is still 23.8% lower than the Woods & Poole Economics forecast of 320,450 non-farm jobs (including proprietorships). See Figures 4.2 and 4.3.



# **METHODOLOGY**

The socioeconomic control total forecasts for the Lexington area reflect the methodology specified in the project work program. These control totals are used in the trip generation component of the travel model, and are then disaggregated to Travel Analysis Zones. Historical trends for the United States, Kentucky, and each county are used to forecast key socioeconomic variables to the year 2030 using regression analysis provided through the socioeconomic data forecasting software package "Forecast Pro."

County control totals were generated for labor, population, households, total employment (as well as the nine major employment sectors excluding farms), median household income, and personal vehicles. The population forecasts were developed using the "labor force linkage-cohort survival population" technique. Because labor force projections drive the population forecast model (whose results in turn drive the forecasts for households, income, and vehicle ownership), the labor force projections are the most significant factor in the control totals except for employment. Figure 4.4 below shows the control totals for the Lexington Area.

Figure 4.4 - Summary of Forecast Control Totals for the Lexington Area

| Variable  | 1990 <sup>a</sup> | 1995 <sup>a</sup> | 2000 <sup>a</sup> | 2005 <sup>b</sup> | 2010 <sup>b</sup> | 2015 <sup>b</sup> | 2020 <sup>b</sup> | 2025 <sup>b</sup> | 2030 <sup>b</sup> |
|---|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Labor Force   | 145,659           | 153,212           | 167,945           | 177,003           | 190,069           | 202,239           | 213,632           | 224,290           | 234,205           |
| Total Population  | 255,874           | 277,714           | 299,553           | 316,676           | 337,182           | 359,435           | 381,042           | 392,296           | 403,550           |
| Group Quarters  | 12,757            | 13,638            | 14,519            | 14,975            | 15,474            | 15,974            | 16,473            | 16,972            | 17,472            |
| Household Population  | 243,117           | 264,075           | 285,034           | 301,701           | 321,708           | 343,461           | 364,569           | 385,378           | 406,562           |
| Households (occupied units)                                     | 100,421           | 111,288           | 122,155           | 130,115           | 139,842           | 150,300           | 160,673           | 170,781           | 181,161           |
| Household Size  | 2.42              | 2.37              | 2.33              | 2.32              | 2.30              | 2.29              | 2.27              | 2.26              | 2.24              |
| Median Household Income<br>(year 2000 dollars)                  | \$39,550          | \$40,401          | \$41,846          | \$42,787          | \$43,680          | \$44,121          | \$44,415          | \$44,638          | \$44,669          |
| Total Vehicles  | 188,475           | 193,501           | 224,744           | 248,922           | 270,870           | 292,424           | 313,778           | 335,005           | 356,142           |
| Personal (Household)<br>Vehicles                                | 181,933           | 185,280           | 213,518           | 233,750           | 252,557           | 271,216           | 289,836           | 308,442           | 327,039           |
| Retail Employment   | 30,362            | 34,271            | 37,608            | 40,223            | 42,668            | 44,512            | 45,742            | 46,978            | 48,728            |
| Non-retail Employment <sup>c</sup>                              | 124,018           | 139,383           | 156,958           | 171,727           | 187,306           | 200,148           | 209,582           | 217,365           | 226,070           |
| Mining  | 122               | 87                | 132               | 132               | 132               | 132               | 132               | 132               | 132               |
| Construction  | 8,209             | 8,407             | 11,112            | 11,496            | 12,270            | 12,929            | 13,441            | 13,951            | 14,588            |
| Manufacturing   | 20,685            | 20,498            | 21,377            | 22,242            | 23,117            | 23,958            | 24,587            | 25,194            | 26,348            |
| Transportation /<br>Public Utilities                            | 7,494             | 8,983             | 9,368             | 10,137            | 10,946            | 11,664            | 12,298            | 12,932            | 13,638            |
| Wholesale   | 7,114             | 7,934             | 8,842             | 9,351             | 9,819             | 10,145            | 10,316            | 10,465            | 10,761            |
| Finance / Insurance<br>/ Real Estate                            | 8,245             | 7,651             | 7,932             | 8,330             | 8,605             | 8,802             | 8,879             | 8,966             | 9,157             |
| Services  | 47,652            | 58,000            | 68,072            | 78,064            | 88,604            | 97,346            | 104,012           | 109,262           | 113,978           |
| Government  | 24,199            | 27,550            | 30,123            | 31,974            | 33,813            | 35,173            | 35,916            | 36,462            | 37,468            |
| Total Employment (nonfarm without proprietorships) <sup>c</sup> | 154,380           | 173,654           | 194,566           | 211,950           | 229,975           | 244,661           | 255,324           | 264,343           | 292,940           |

arces: (a) Kentucky Workforce Development Cabinet Department of Employment Services adjusted to the U.S. Bureau of Labor Statistics numbers for "wage and salary" employment; U.S. Bureau of Labor Statistics for labor force; U.S. Bureau of the Census for 1990-2000 population and housing; and Kentucky Cabinet for Economic Development for median household income.

<sup>(</sup>b) Bernardin-Lochmueller & Associates for Projections

<sup>(</sup>c) Due to unclassified jobs, sum of individual sectors does not equal total.

#### **CHAPTER 4 – PLAN DEVELOPMENT**

Labor force projections are fed into the population forecast model to define the net migration component added to the cohort-survival forecasts for the indigenous population (i.e., excluding college students who previously lived outside the county). The forecasts of the "recommended" population projections are summarized in Figure 4.4. The "recommended" population projection for Fayette County reflects constant average birth rates, projected national survival rates, and a labor force participation rate following the national trend. Jessamine County's "recommended" population projection uses the consulting firm of Bernardin, Lochmueller, and Associates' forecasted birth rates (the projected national survival rates), and assumes the labor force participation rate is converging with the forecasted national rate.

For the household forecasts, household size in Fayette and Jessamine County was trended with a decreasing gap between national and county household size. Assuming continued historical growth in group quarters population in Fayette County and no growth in Jessamine County (dormitories, fraternity/sorority houses, and institutions), projected household size was used to convert the population forecast to households.

Trending total personal income (in constant dollars), the total personal income forecast is divided by the forecasted number of households to derive the mean household income, which is converted to yield the median household income. Even with the number of total households increasing, the median household income (in constant dollars) in Fayette County is forecasted to increase in future years. The median household income (in constant dollars) in Jessamine County is forecasted to remain approximately the same as its value in the year 2000 due to the increasing number of households.

Regression models were used to forecast total vehicle registrations for each county. The personal vehicle registrations forecasts were derived for each county by assuming the historical trend in the percentage of the total vehicle registrations will continue.

Finally, employment projections were developed from trends and relationships to Kentucky and the United States. Projections were made for total employment and for the major employment sectors (one-digit SIC code). The major employment sector forecasts were summed for comparison. For Jessamine County the major employment sectors were factored to equal the total employment forecast for the county. For Fayette County the sum of the major employment sectors was chosen as the total employment forecast for the county.

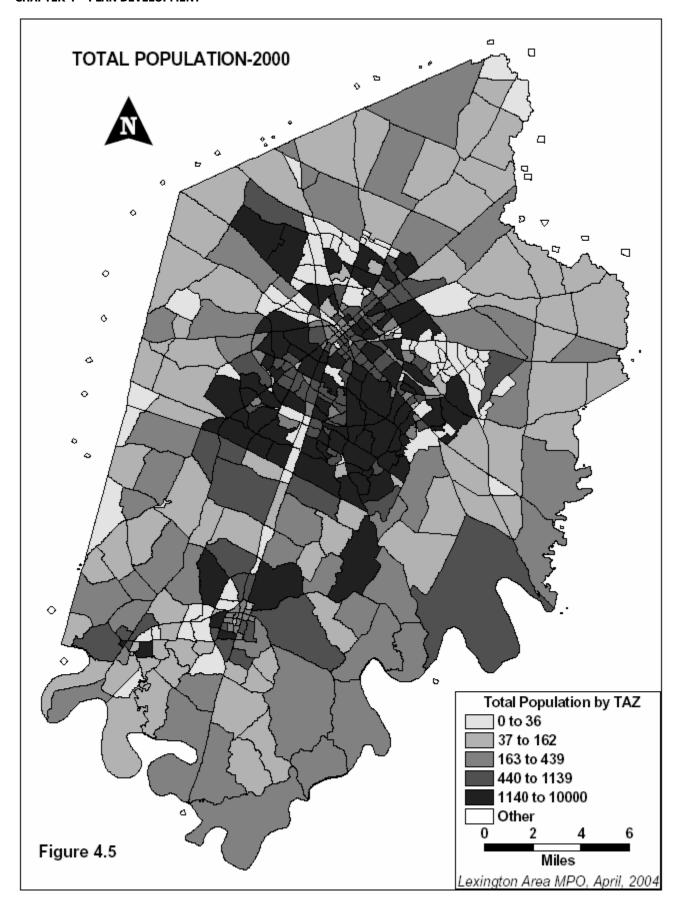
# PROJECTION METHODS

## Labor Force

Historical labor force data for the United States, Kentucky, and Fayette and Jessamine County was obtained from the U.S. Bureau of Labor Statistics with annual averages from 1974-2001. National labor force projections were derived using labor force projections published in Monthly Labor Review published by the U.S. Bureau of Labor Statistics. "Forecast Pro for Windows" socioeconomic data forecasting software used the historical data and the forecast of national labor force to forecast the labor force for Kentucky. To forecast labor force for each county, dynamic regression models were used in "Forecast Pro." Dynamic regression utilizes time-series, explanatory variables, and leading indicators. When using dynamic regression, the criteria to consider include maximizing the R-squared (the coefficient of determination), having a Durbin-Watson statistic around 2.0, and minimizing the forecast error. Agreement between various forecasts is also considered in the selection process. The selected forecast models for Fayette and Jessamine counties were chosen based on the best statistical support.

# **Population**

The population was projected using the Labor Force Linkage/Cohort Survival Population Projection Model. The four required input files for this model are the base year population, birth rates, survival rates, and labor force projections/participation rates. This model projects population in 5-year intervals from the base year to a target year. A base year of 2000 was used to utilize the Census year data. The cohort survival rates are only applied to the indigenous population. The non-indigenous population associated with the University of Kentucky and Transylvania College is removed and reinserted for each five-year period so as not to age (see Figure 4.5).



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Base year population, broken down by age and sex, was obtained from the 2000 Decennial Census. Age-specific birth rates for Fayette and Jessamine County were obtained from the Kentucky Cabinet of Health Services Department of Public Health for the years 1982-1999. National five-year survival rates by age and sex based on a middle mortality assumption were acquired from the U.S. Bureau of the Census.

The national survival rates were used due to a lack of a reliable and accurate source for local survival rates. The labor force projections used were those forecasted as described above. Labor force participation rate historical data was obtained from the Decennial Census for the years 1980, 1990 and 2000, and was estimated using the Kentucky Workforce Development Cabinet Department of Employment Services revised annual labor force for the year 1995. The "recommended" population projection assumed the labor force participation rate will follow the national trend in Fayette and Jessamine counties. If the rates were not reduced similar to the national forecasts after the year 2010, there would be less population growth in Fayette and Jessamine County.

#### Households

The total number of households for each county was calculated in two steps. The first step involved taking the population projections and subtracting out the group quarters population. The group quarters population was projected assuming the absolute number from the 2000 Census would remain constant for Jessamine County and the group quarters population in Fayette County would continue to grow at historical rates. The second step divided the total population in households (total population forecasted less those in group quarters) by the projected household size (persons-per-household) to derive the forecast of total households. Historical persons-per-household data was obtained from the U.S. Bureau of the Census for years 1970, 1980, 1990, and 2000.

Projected persons-per-household for Fayette and Jessamine County were based on a slow convergence towards projected United States persons-per-household as reported in *Current Population Reports P25-1129*, published by the U.S. Department of Commerce.

# **Median Household Income**

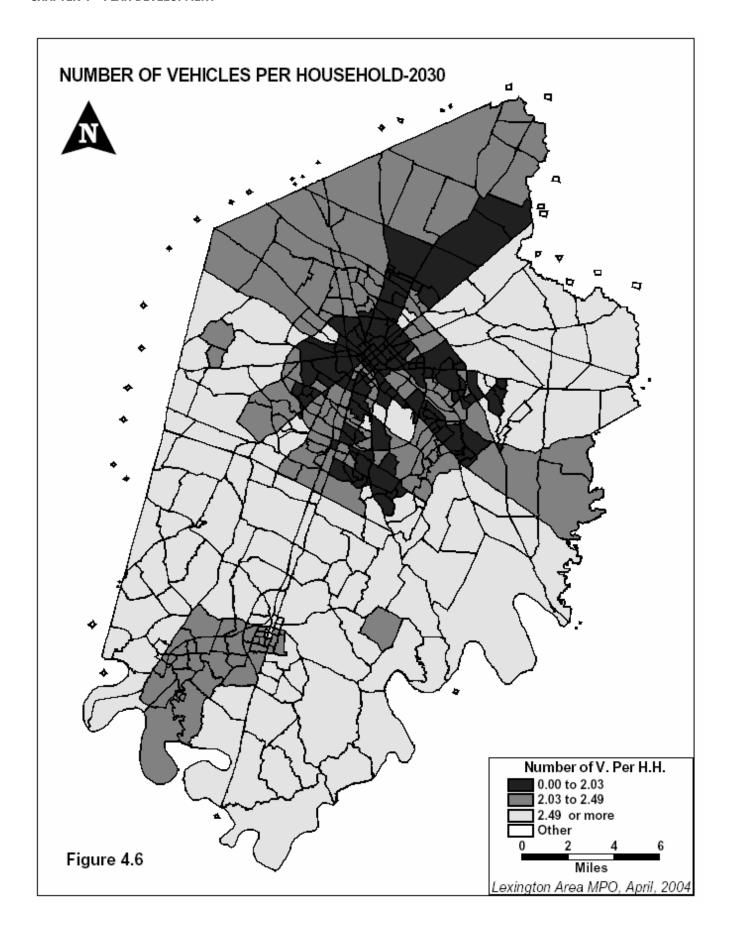
Total personal income historical data for Fayette and Jessamine County was obtained from the U.S. Bureau of Economic Analysis. This historical data was converted to year 2000 dollars using a consumer price indices adjustment program.

A projection of total personal income (in year 2000 constant dollars) was made based on the income trend between years 1980 and 2000. A mean household income (in year 2000 constant dollars) was calculated by dividing the projected total personal income (in year 2000 constant dollars) by the projected number of households. A median-to-mean ratio was calculated from historical data obtained from the Kentucky State Data Center and the U.S. Bureau of the Census for years 1989, 1993, 1995, 1997, 1998, and 1999. The ratios for Fayette and Jessamine County showed a fairly steady long-term decrease, and the median-to-mean ratio was assumed to continue this trend through the year 2030. The median household income (in year 2000 constant dollars) for each county was calculated by multiplying the mean household income (in year 2000 constant dollars) times the median-to-mean ratio.

# **Personal Vehicles**

Historical total vehicle registrations for Fayette and Jessamine County were obtained from the Kentucky Cabinet for Economic Development. "Forecast Pro" was used to forecast total vehicle registrations for the county. The same criteria as described above was used to pick the best statistically supported model. See Figure 4.6 for forecasted numbers of vehicles per household for the year 2030.

Historical household (personal) vehicle data was obtained from Decennial Census for 1990 and 2000 and was used to calculate what percentage of total vehicle registrations is composed of household vehicles. In Fayette County, the historical data described an increase in the household percentage, and it was assumed that this trend would continue thought the target year. In Jessamine County, the historical data described a decrease in the household percentage, and it was assumed that this trend would also continue, albeit at lesser rates. Total personal vehicles were then calculated by multiplying the household percentage times the forecasted total vehicle registrations.



# **Employment**

Historical employment data for Fayette and Jessamine County and Kentucky was obtained from the Kentucky Cabinet for Workforce Development Department of Employment Services. Historical data for the United States was obtained from *Employment & Earnings*, published by the Bureau of Labor Statistics. The Kentucky Workforce Development Cabinet Department of Employment Services employment statistics are for workers covered by unemployment insurance. These employment statistics were scaled up to agree with U.S. Bureau of Labor Statistics numbers, which also include various uninsured workers.

Regional Economic Information System (REIS), published by the Bureau of Economic Analysis, provided projections for the United States. The growth percentages used in the REIS projections were applied to the historical data to project National employment to the target year. The national projections were used in the dynamic regression and exponential smoothing models of "Forecast Pro" to forecast employment for the state of Kentucky. Together the state and national projections were used in the dynamic regression model of "Forecast Pro" to forecast employment for Fayette and Jessamine County. The same statistical criteria as described above were used in deciding which forecast is best supported. Forecasts were made for total employment and for each of the 1-digit Standard Industrial Classification (SIC) code industries. For Jessamine County, the 1-digit industries were factored so that their sum equaled the forecast of total employment. For Fayette County, the forecasted total employment was calculated by summing the 1-digit industries.

### EXISTING SOCIOECONOMIC DATA BY TAZ

# **Demographic Data**

To establish demographic data for the year 2000, the consultant began with 2000 Census "Block Statistics" information on population, group quarters, household population and households. Household characteristics were also obtained from the 2000 Census for household income, auto ownership, workers, and students. This information was electronically matched to the Fayette County and Jessamine County Travel Analysis Zones (TAZs). The consultant obtained enrollment information for primary and secondary schools, technical/business schools and colleges from the Kentucky Education Cabinet database, and verified the information by contacting the schools.

# **Employment Data**

The consultant began with the American Business Directory address-specific listing of businesses with employee ranges and Standard Industrial Classification (SIC) codes for the year 2000. Information on specific employment by establishment was obtained from Greater Lexington Chamber of Commerce and the Kentucky Economic Development Cabinet databases. This later information was integrated into the American Business Directory database to verify accuracy and to ensure specific employment numbers (rather than ranges) for larger employers (The mid-point of the employment range was used for employers of less than 100 persons when a specific employment number was not available). Telephones contacts were made for employers of 100 or more persons to get specific employment numbers when Chamber of Commerce data was not available. Businesses were then matched by address to the Lexington Area TAZs, and the inter-net was used to obtain addresses for unmatched businesses. Finally, the locations of businesses with 100 or more employees were reviewed by the Lexington-Fayette County Urban Government Division of Planning staff to ensure the businesses were placed in the correct TAZ and had reasonable employee numbers.

# **School Enrollment Data**

The Kentucky Education Cabinet database served as the starting point for school enrollment by school address. The consultant contacted the University of Kentucky, Transylvania College and Asbury College to get information on student enrollment, on-campus housing, employment, and parking facilities. The Lexington-Fayette Urban County Government also provided information on the residential address of University of

#### **CHAPTER 4 – PLAN DEVELOPMENT**

Kentucky students that was matched to TAZs. Finally, the consultant contacted the Fayette County Public Schools, Jessamine County Schools and individual parochial schools for student enrollment at each elementary, middle and high school. This information permitted the assignment of college/vocational enrollment and primary/secondary school enrollment to TAZs.

Information on University of Kentucky parking was used to relocate the on-campus residential population and employment to parking facilities for proper loading onto the surrounding roadway network. Figure 4.7 below documents the reallocation of the University of Kentucky on-campus resident population on the basis of residential parking permits issued by lot within each TAZ. As a trip attraction, the student enrollment at the University of Kentucky is allocated on the basis of the commuter parking permits issued for each lot by TAZ. Because trip making internal to the campus is not part of the travel model, the student enrollment trip attraction will be reduced to the off-campus commuter trip production. In conjunction with the allocations, this reduction has the effect of removing the on-campus enrollment from the trip attractions. A database on the addresses of off-campus students provided by the Lexington-Fayette County Urban County Government was used to establish student commuter trip generation for off-campus TAZs. University of Kentucky Campus and Chandler Medical Center employment were reallocated to parking areas based on a year 2000 parking occupancy study.

Figure 4.7 - University of Kentucky Campus Resident, Enrollment and **Employment Reallocation to Parking Areas for Year 2000** 

| TAZ   | Total<br>Population | Group Quarters<br>Population | Enrollment | Total<br>Employment | University<br>Employment | Hospital<br>Employment |
|-------|---------------------|------------------------------|------------|---------------------|--------------------------|------------------------|
| Old   | Allocation          |                              |            |                     |                          |                        |
| 16    | 1032                | 997                          | 0          | 0                   | 0                        | 0                      |
| 17    | 167                 | 9                            | 0          | 0                   | 0                        | 0                      |
| 34    | 4342                | 3609                         | 0          | 12699               | 8598                     | 3000                   |
| 35    | 241                 | 0                            | 0          | 253                 | 0                        | 0                      |
| 36    | 978                 | 32                           | 0          | 0                   | 0                        | 0                      |
| 74    | 9                   | 0                            | 0          | 0                   | 0                        | 0                      |
| 75    | 1469                | 597                          | 0          | 0                   | 0                        | 0                      |
| 96    | 1657                | 140                          | 0          | 0                   | 0                        | 0                      |
| 98    | 1230                | 0                            | 0          | 0                   | 0                        | 0                      |
| 389   | 0                   | 0                            | 0          | 0                   | 0                        | 0                      |
| 391   | 964                 | 465                          | 0          | 0                   | 0                        | 0                      |
| Total | 12089               | 5849                         | 34232      | 12952               | 8598                     | 3000                   |
| Nev   | v Allocation        |                              |            |                     |                          |                        |
| 16    | 436                 | 401                          | 2641       | 669                 | 669                      | 0                      |
| 17    | 158                 | 0                            | 1295       | 1075                | 1075                     | 0                      |
| 34    | 2432                | 1699                         | 4000       | 5700                | 3153                     | 1446                   |
| 35    | 241                 | 0                            | 0          | 2302                | 495                      | 1554                   |
| 36    | 946                 | 0                            | 2758       | 256                 | 256                      | 0                      |
| 74    | 2933                | 2924                         | 21822      | 2014                | 2014                     | 0                      |
| 75    | 1595                | 723                          | 1504       | 65                  | 65                       | 0                      |
| 96    | 1619                | 102                          | 212        | 0                   | 0                        | 0                      |
| 98    | 1230                | 0                            | 0          | 463                 | 463                      | 0                      |
| 389   | 0                   | 0                            | 0          | 293                 | 293                      | 0                      |
| 391   | 499                 | 0                            | 0          | 115                 | 115                      | 0                      |
| Total | 12089               | 5849                         | 34232      | 12952               | 8598                     | 3000                   |

Source: Bernardin, Lochmueller & Associates, Inc.

### 2000 SOCIOECONOMIC DATA BY TAZ

Documentation of all the socioeconomic variables by Travel Analysis Zone (TAZ) for the year 2000 can be found in "Lexington Area TransCad Model Upgrade, Technical Memorandum: Travel Model Development-Geographic Component (Socio-Economic databases)" prepared by Bernadin, Lochmueller and Associates.appears. As shown on figure 4.7 previously, Fayette County TAZs are numbered 1-281, 387-394, 412-435 and 500-550. Jessamine County TAZs are 282-386, 395, 397, 450-455 and 600-605. Please note that University of Kentucky employment and resident population have been reallocated to where people park.

Figure 4.8 below shows a comparison of the 2000 Census demographics and the TAZ demographics for the year 2000 for the Lexington Area (Fayette and Jessamine Counties) shows agreement.

Figure 4.8 - Comparison of 2000 Census and TAZ Demographic Totals For Lexington Area (Fayette and Jessamine Counties)

| C                         | 2000 Census       |                     |         | TAZ Totals        |                     |         |  |
|---------------------------|-------------------|---------------------|---------|-------------------|---------------------|---------|--|
| Component                 | Fayette<br>County | Jessamine<br>County | Total   | Fayette<br>County | Jessamine<br>County | Total   |  |
| Population                | 260,512           | 39,041              | 299,553 | 260,512           | 39,041              | 299,553 |  |
| Group Quarters Population | 12,723            | 1,796               | 14,519  | 12,724            | 1,796               | 14,520  |  |
| Household Population      | 247,789           | 37,245              | 285,034 | 247,789           | 37,245              | 285,034 |  |
| Households                | 108,288           | 13,867              | 122,155 | 108,288           | 13,867              | 122,155 |  |

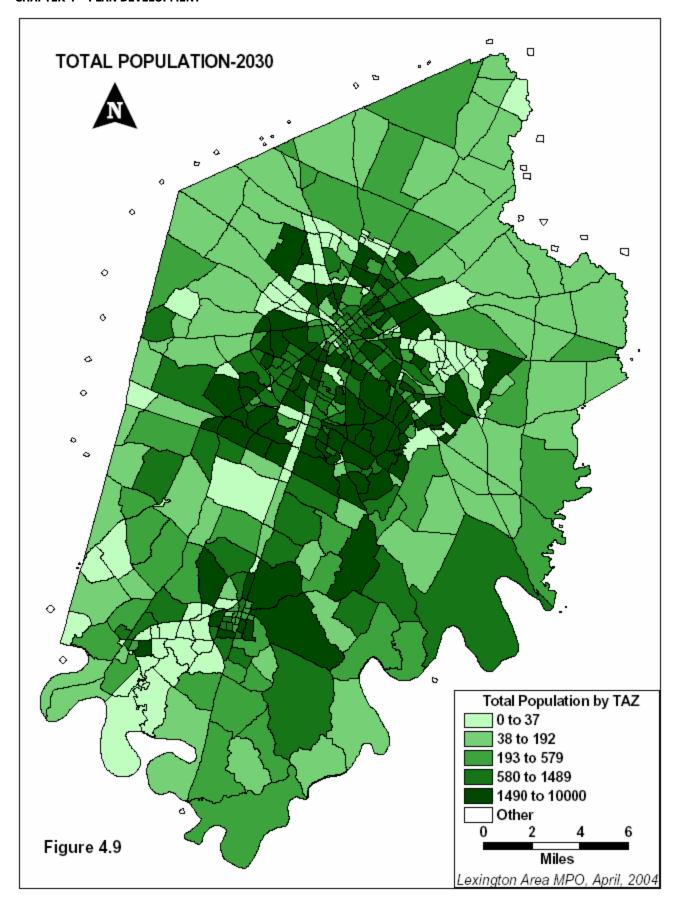
Source: Bernardin-Lochmueller & Associates, Inc.

In the case of employment, differences in employment based on "wage and salary" (non-farm employment less proprietorships) information from the Kentucky Workforce Development Cabinet and based on "total" employment (including farm and proprietorships) from the American Business Directory database had to be reconciled. Trends in Kentucky Workforce Development Cabinet "wage and salary" data served as the foundation for future employment forecasts; whereas, the American Business Directory database served as the basis for the address matching employment to individual TAZs.

In addition to the fact that the American Business Directory contains farm employment and proprietorships, employment in the American Business Directory is reported by Standard Industrial Classification code without regard to the type of ownership. In contrast, the Kentucky Workforce Development Cabinet first records employment by the type of ownership (i.e., public versus private) and then by the business sector (Standard Industrial Classification code). This difference in reporting is most apparent in the employment totals for the Services Sector and the Government Sector. The Kentucky Workforce Development Cabinet reports employment for public universities, schools and health care facilities under the Government Sector; whereas, the American Business Directory reports public education and public health employees under the Services Sector.

# FUTURE SOCIOECONOMIC DATA BY TAZ

The development of future socioeconomic data by TAZ involved the allocation of countywide growth between the year 2000 and the forecast year of 2030 to TAZs. See Figure 4.9 for total population for the year 2030.



#### **CHAPTER 4 – PLAN DEVELOPMENT**

#### **RESULTS**

For information on the number of households and employees allocated, refer to Figures 4.10 and 4.11. Adjustments were made in housing demolitions and the housing vacancy rates to achieve the target for the net change in households over the 30-year period of 45,261 for Fayette County and 13,745 for Jessamine County (a total of 59,006 households for the Lexington Area).

The university/college enrollment was held constant between the years 2000 and 2030. Change in other school enrollment over the 30-year period was based on the change in the school age population between the years 2000 and 2030.

The ratio of the American Business Directory "total" employment database (wage and salary, plus farm and proprietorships) to the Workforce Development Cabinet "wage and "salary" employment for each business sector in the year 2000 was applied to the year 2030 forecast of Workforce Development "wage and salary" employment to establish year 2030 TAZ control totals for each business sector. The Woods & Poole Economics decline in farm employment projections is used to forecast farm employment.<sup>3</sup>

Figure 4.10 - Summary of Land Use Allocations for Lexington Area (Fayette and Jessamine Counties)

| Component                            | Fayette Co. | Jessamine Co. | Total   |
|--------------------------------------|-------------|---------------|---------|
| Households in Year 2000              | 108,288     | 13,867        | 122,155 |
| Household Change Years 2000 to 2030  | 45,261      | 13,745        | 59,006  |
| Households in Year 2030              | 153,549     | 27,612        | 181,161 |
| Total Employment in Year 2000        | 187,017     | 16,254        | 203,271 |
| Employment Change Years 2000 to 2030 | 74,827      | 14,842        | 89,669  |
| Employment Allocated                 | 74,827      | 14,842        | 89,669  |
| Total Employment in Year 2030        | 261,844     | 31,096        | 292,940 |

Source: Bernardin-Lochmueller & Associates, Inc.

Figure 4.11 - Summary of Existing and Future Socio-Economic Data by TAZ for Lexington Area (Fayette and Jessamine Counties)

| Component                        | Year 2000 | Change from 2000 to 2030 | Year 2030 |
|----------------------------------|-----------|--------------------------|-----------|
| Population                       | 299,553   | 103,997                  | 403,550   |
| Group Quarters Population        | 14,519    | 2,953                    | 17,472    |
| Household Population             | 285,034   | 101,044                  | 386,078   |
| Households                       | 122,155   | 59,006                   | 181,161   |
| Grades K to 12 School Enrollment | 44,633    | 13,562                   | 58,195    |
| College & University Enrollment  | 38,502    | 0                        | 38,502    |
| Total Enrollment                 | 83,135    | 13,562                   | 96,697    |

<sup>2000</sup> County Data; Woods & Poole Economics, Inc.

| Farm Employment   | 4,223   | - 1,140 | 3,083   |
|---|---------|---------|---------|
| Mining Employment   | 390     | 0       | 390     |
| Construction Employment                                     | 11,111  | 3,181   | 14,292  |
| Manufacturing Employment                                    | 19,230  | 3,795   | 23,025  |
| Transportation, Communication & Public Utilities Employment | 10,847  | 4,951   | 15,798  |
| Wholesale Employment  | 16,882  | 9,091   | 25,973  |
| Retail Employment   | 40,989  | 11,004  | 51,993  |
| Finance, Insurance & Real Estate Employment                 | 11,812  | 1,792   | 13,604  |
| Services Employment   | 82,946  | 56,077  | 139,023 |
| Government Employment                                       | 4,610   | 1,149   | 5,759   |
| Total Employment  | 203,271 | 89.669  | 292,940 |

Source: Bernardin-Lochmueller & Associates, Inc.

Figure 4.11

### TRAVEL DEMAND FORECASTING PROCESS

A primary objective of this plan is to determine future travel demands, their associated impacts and plan effective strategies to manage them that meet our goals, objectives, and vision for our area. There is a popular myth/perception that growth is unpredictable and, therefore, adequate planning is not possible. In fact, growth is predictable and plans made in advance are essential to cope with it. Failure to carry out proper transportation planning would result in severe traffic congestion and the detrimental impacts that accompany it throughout the Lexington MPO area.

The transportation planning process relies heavily on travel demand forecasting, which involves predicting the impacts that area growth, various policies, programs, and projects will have on travel and the travel system in the area. The travel forecasting process provides detailed information such as; traffic volumes, turning movements, vehicle speeds, vehicle delay, and vehicle miles of travel (VMT). VMT and speeds are the primary factors used to determine automobile emissions such as carbon monoxide (CO), ozone, and ozone precursors including hydrocarbons (HC), nitrogen oxides (NOx), and volatile organic compounds (VOC). A typical travel demand forecast might show the volume of vehicles on a new/proposed future road and its effect on the existing transportation system in the area.

Travel demand is determined largely by the distribution of the area's population and land use. The section above on Socioeconomic Data discusses methods used by the Lexington MPO staff to estimate future years population, households, automobiles, employment and their intensity and distribution over the two-county MPO area. Fayette and Jessamine comprehensive land use plans, census information, and other area data sources were utilized in this process. This information is allocated to segmented parcels of land called traffic analysis zones (TAZs) and input into the MPO computerized travel demand forecasting model. This model is a generalized computer representation/simulation of the area's transportation network system for selected future years combined with complex mathematical equations, parameters and algorithms which simulate how and where future travel will use this system.

After the region's socioeconomic activity is forecasted as described above, there are four basic phases in the traditional travel demand forecasting process.

- 1. **Trip generation** forecasts the number of trips that will be generated from the land use in each traffic analysis zone.
- 2. **Trip distribution** determines where the trips will come from and go to (or zone-to-zone travel volumes).

### **CHAPTER 4 – PLAN DEVELOPMENT**

- 3. **Mode usage** predicts how the trips will be divided among the various available modes of travel.
- 4. **Trip assignment** predicts the routes that the trips will take, resulting in traffic forecasts for the highway system and ridership forecasts for the transit system.

It is very important that travel demand models be "calibrated." To calibrate means to adjust model equations, parameters, validate input data, and other model structures until the models replicate actual travel patterns exhibited by origin destination surveys and actual traffic counts for the "base year". The Census Transportation Planning Package (CTPP) data was available and utilized in this process for the Lexington area travel demand model in 1995. Once a model has been calibrated, it will predict travel with an acceptable degree of accuracy. Only then can various highway alternatives be tested properly. For this plan, year 2000 model traffic flow assignments were checked against available year 2000 data to validate model results.

### **EXISTING PLUS COMMITTED SYSTEM**

The existing plus committed system consists of transportation facilities that currently exist <u>and</u> projects that have not been completed but have committed funding and construction phases falling in or before the year 2010. 2010 is the last year of the current Kentucky State Six Year Plan. This plan contains all Kentucky's programmed transportation projects that have committed federal or state funding. The Existing plus Committed transportation system is the base from which all plan alternatives/scenarios are built upon. Current committed road projects are listed in Figure 4.12.

| Figure 4.12: | COMMITTED | <b>PROJECTS</b> | (Construction | by 2010) |
|--------------|-----------|-----------------|---------------|----------|
|--------------|-----------|-----------------|---------------|----------|

| MPO#   | PROJECT   | DESC.    | CONS. YEAR |
|--------|---|----------|------------|
| 009.13 | Loudon Avenue – Oakhill Drive to Winchester Road (US-60)                    | Widening | 2004       |
| 042.83 | Liberty Rd. / Todds Rd. (KY-1927) – Cadentown Bypass                        | Widening | 2005       |
| 037.33 | Harrodsburg Road (US-68) – 4800' S. of Brannon (KY-1980) to KY-29           | Widening | 2006       |
| 008.13 | Leestown Road (US-421) – New Circle Road (KY-4) to Masterson Station        | Widening | 2007       |
| 010.13 | Liberty Rd. / Todds Rd. (KY-1927) – Forest Hill to I-75                     | Widening | 2009       |
| 046.22 | Citation Boulevard Phase II - Southern Railroad to S. of Leestown Road (US- | New Road | 2009       |
|        | 421)  |          |            |
| 043.22 | Newtown Pike Extension – W. Main to S. Limestone Street                     | New Road | 2009       |
| 012.13 | Clays Mill Road – New Circle Road to Man o'War Boulevard                    | Widening | 2010       |

# FUTURE HIGHWAY TRANSPORTATION SYSTEM DEFICIENCIES

Through the travel demand forecasting process described previously, future highway capacity deficiencies are identified. Proposed highway improvement projects are evaluated to determine their effectiveness in resolving these deficiencies. The process allows the staff to technically prioritize proposed highway improvements or to eliminate them from consideration if they do not prove to be effective. Alternative methods of transportation such as: transit, ridesharing, vanpools, bicycles, pedestrian and aviation are also evaluated, where they may be appropriate.

The year **2030** was chosen as the planning horizon year to analyze the transportation system's ability to serve projected travel demand. The standard planning and design period is a minimum of 20 years. With a 2030 horizon year the Lexington-Area MPO will have the ability to make potential long-range Transportation Plan amendments, if necessary, and maintain a required minimum 20-year planning period.

One of the primary variables used to determine which links will experience future year capacity deficiencies is volume to capacity ratio (V/C). V/C is defined as the ratio of vehicle demand flow to capacity for a traffic facility. Capacity values vary by facility and area type. Facility types range from local streets to collectors to arterials to freeways/expressways. Area types range from Central Business Districts to Rural areas. V/C ratios is a model performance measure that indicates if a certain link in the system is operating under, near, or over its capacity for a given level-of-service. Level-of-service descriptions are given below in Figure 4.13.

#### **CHAPTER 4 – PLAN DEVELOPMENT**

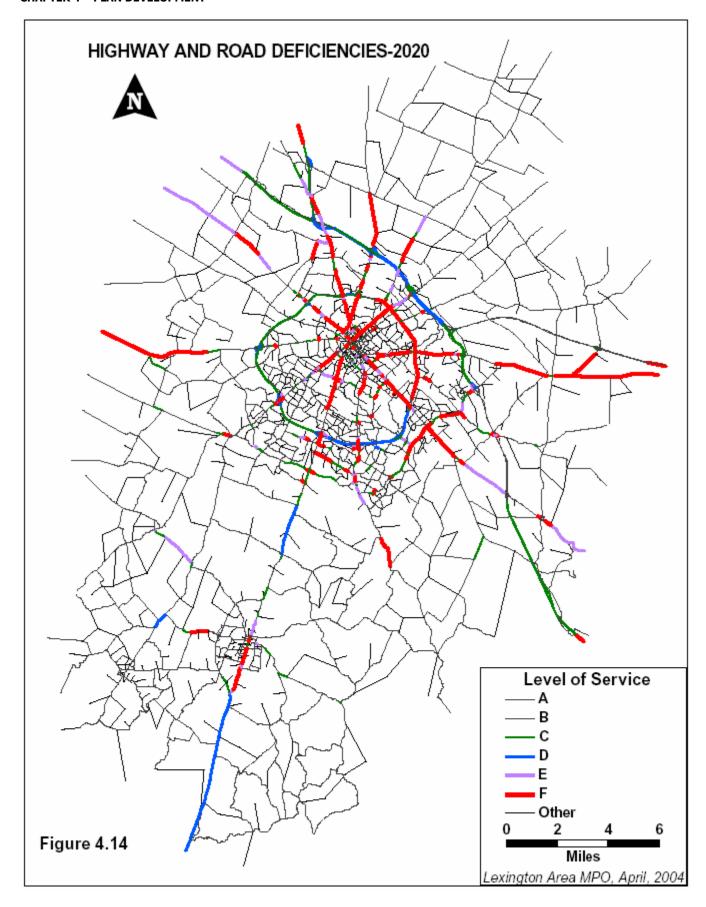
Figure 4.13: LEVEL OF SERVICE DESCRIPTIONS

| LOS | DESCRIPTION   |
|-----|---|
| A   | Represents the best operating conditions. Traffic is free flowing and drivers are able to drive at their desired speed. Delays are minimal.   |
| В   | Traffic flow is stable, but the presence of other vehicles in the traffic stream becomes noticeable. Freedom to select a desired speed is not affected, but freedom to maneuver slightly declines. Delays remain minimal.   |
| C   | Traffic flow is stable, but interactions with other vehicles in the traffic stream begin to affect operations. Speed selection and maneuvering are affected by the presence of other vehicles. Delays become noticeable and general levels of comfort and convenience decline noticeably as well.   |
| D   | This represents high density, but stable, flow. Speed and freedom to maneuver are severely restricted, but traffic flow remains high. Delays are more substantial and intersection queues form frequently. Though driver comfort and convenience generally are poor, the utility or productivity of the facility is high. This is often considered to be the limit of acceptability for planning purposes in urban areas. |
| E   | Operating conditions are at or near capacity. All speeds are reduced to a low, but relatively uniform value. Freedom to maneuver is extremely difficult and driver comfort and convenience levels are extremely poor. Delays approach becoming unacceptable and operations are usually unstable.  |
| F   | Oversaturated conditions exist when demand exceeds capacity, resulting in forced or breakdown flow. Operations are characterized by stop-and-go conditions and are extremely unstable. Delays generally exceed limits of driver acceptability. Though undesirable, LOS F conditions are commonplace during peak traffic periods in major urban areas.   |

Source: Highway Capacity Manual, Special Report 209, Transportation Research Board, National Academy of Sciences, Washington, D.C. 1994

As discussed earlier, forecasted 2030 socioeconomic data such as the number of vehicles, households, employees, and other socioeconomic data are used to estimate/generate future year 2030 person trip productions and attractions. The "committed projects" listed above in Figure 4.12 were added to the current/existing or year 2000 base year highway network represented in the computer travel demand model. The year 2000 highway network, together with the committed projects becomes the Existing plus Committed System (E+C). Future year projections of trip productions and attractions, the existing plus committed highway network, and other data files are input into the overall computer travel demand model to model where deficiencies will most likely occur in future years.

Figures 4.14 and 4.15 illustrate where the most severely deficient sections of the road system will occur if no improvements are accomplished beyond the existing and committed improvements in the years 2020 and 2030. Since this plan has to be fiscally constrained, it was necessary to develop a preliminary ranking system. The traffic volumes, volume to capacity ratio, level-of-service, delay, and other performance measures were used as criteria to prioritize and rank future year projects. Also, highway functional classification (principal arterial, minor arterial, collector, etc.) was used to consider the importance of function facilities serve in the system. See Figures 4.16 and 4.17 for projected VMTs for the years 2020 and 2030. In addition to these criteria, input from the Lexington Area MPO Congestion Management System (CMS) Process, Public Involvement Process, and all other MPO Committees and coordination efforts were used to develop proposed priorities for the highway projects.



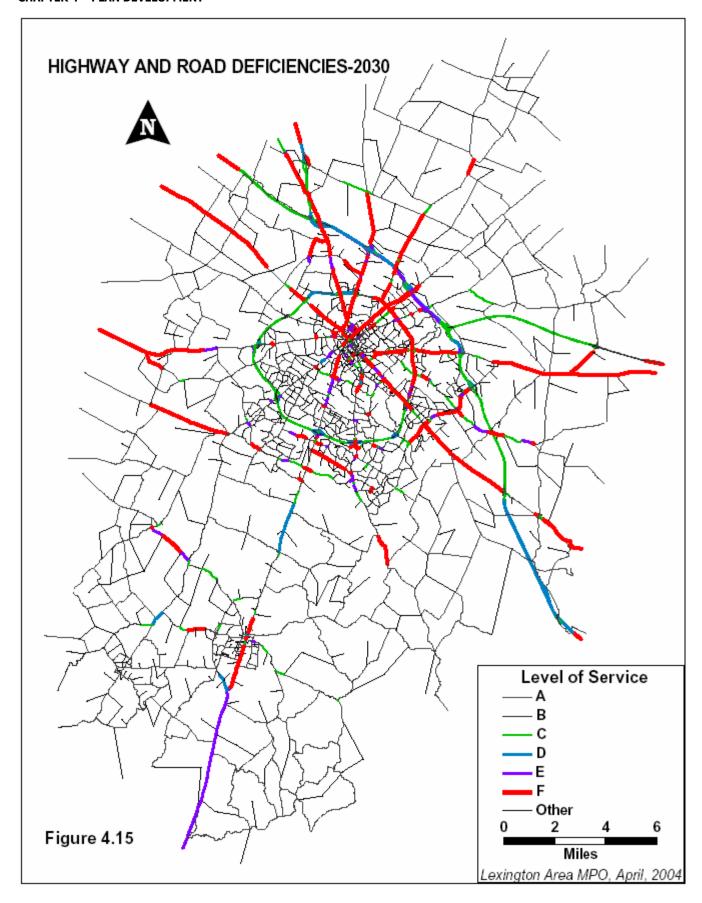
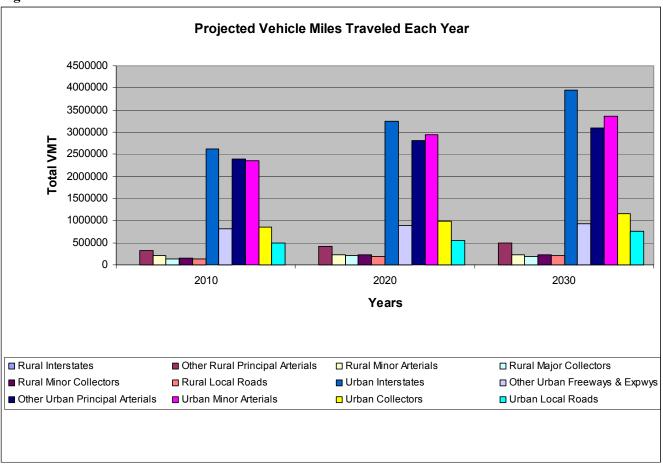
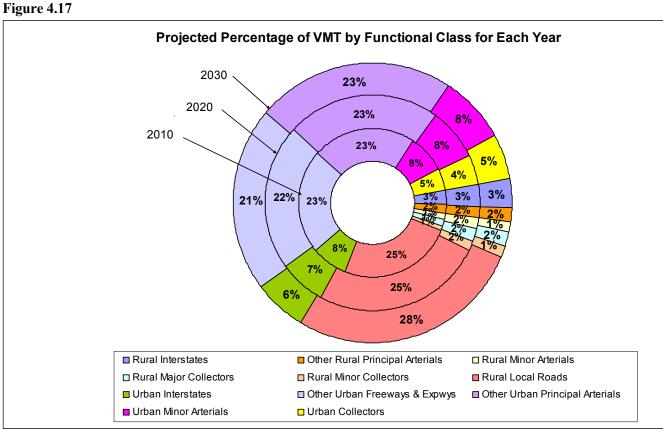
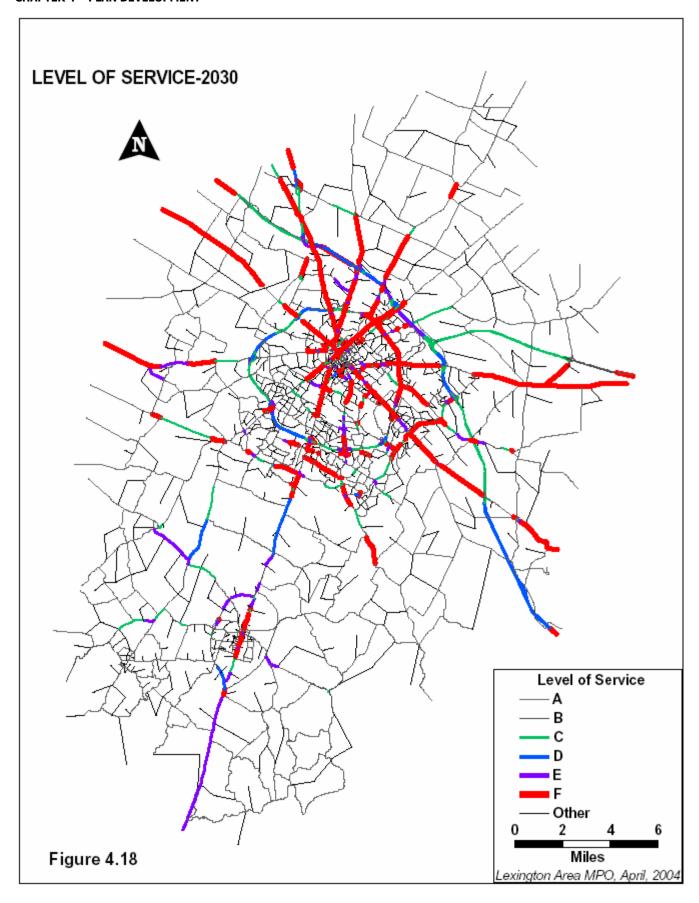


Figure 4.16







### CONGESTION MANAGEMENT SYSTEM - PLANNING PROCESS FLOW

Traffic congestion is an every day fact of life today and it's getting worse each year. The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) and the subsequent Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21) have made congestion one of their main focuses. While there is no one definition of congestion, which is universally accepted, the Transportation Research Board's (TRB) definition was adopted for the study. It states that "Congestion is travel time or delay in excess of that normally incurred under light or free-flow travel conditions."

The Congestion Management system (CMS) supports the planning process by providing information to assist transportation decision-making. Figure 4.19 illustrates a process flow showing the relationship between the management systems and the planning process provides the conceptual relationship of this integration.

The Transportation Management System (TMS) interacts with the planning process at the system level, corridor, and through monitoring and review of implemented projects and actions. Performance measures tied to transportation plan goals and objectives define congestion based on locally established thresholds. Outputs from travel demand models, inventory and usage data, and performance measure thresholds are utilized by the CMS subsystem of the TMS to identify congestion deficiencies. The identified current and future system level congestion deficiencies feed into the CMS Corridor Decision Process.

The CMS Corridor Decision Process is directed at identifying corridors or subareas needing more detailed analysis to identify specific actions to alleviate congestion. At this level, detailed analysis determines causes of congestion problems, and provides a detailed alternative analysis to determine the best means to alleviate congestion. Practical CMS strategies associated with transportation plan goals and objectives help define the solution set.

Travel Demand Management actions appropriate to a corridor are identified. Alternatives are tested through the modeling process. The outputs from travel demand models feed back through the management system where performance measure comparisons are used to determine the "best" course of action.

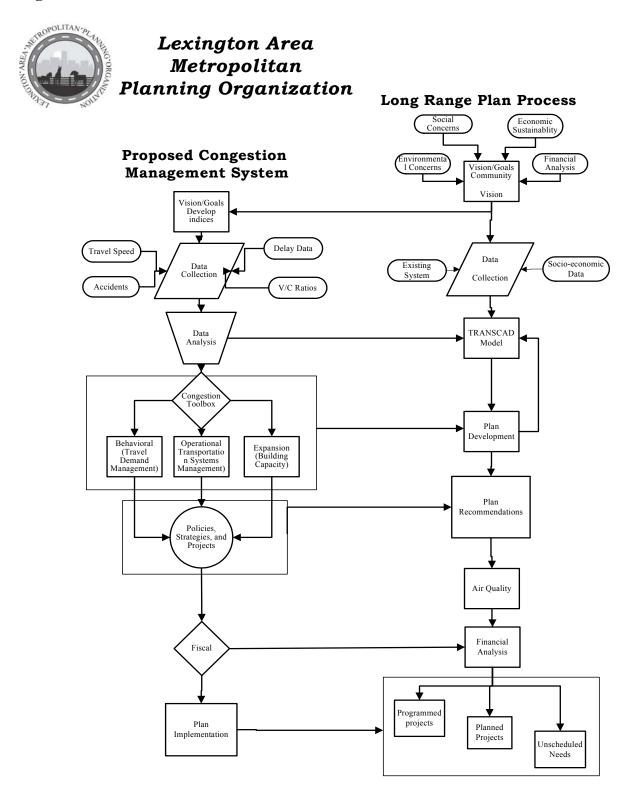
Congestion related performance in the identified current and future corridors and facilities will be monitored on a bi-annual basis. This feed back loop will allow for the monitoring of congestion mitigation needs.

The CMS solution set is input into the Metropolitan/Statewide Long Range Transportation Plan Process. In addition to the major CMS corridor actions/projects, there will be other capital projects to relieve or prevent future congestion. These may include roadway widening, signalization and transit projects. CMS Corridor actions/projects should be coordinated with capital project analysis. Outputs from this process feed into the MPO Transportation Improvement Program (TIP)/State TIP process and reviewed through the CMS Corridor Decision Process.

The following actions are identified as part of the CMS work plan:

- Formulation of performance measures applicable to all modes;
- Methods to monitor and evaluate conditions of the transportation system;
- Identification of alternative actions to address areas where congestion problems are most severe;
- Assessment and implementation of cost-effective traffic congestion mitigation strategies to relieve current or projected levels of congestion;
- Evaluation of the impact of the congestion mitigation strategies implemented

Figure 4.19



To execute the CMS work plan, Global Positioning System (GPS) receivers were combined with Palm Pilots (PDAs) to capture positional data, store it, and plot it against a map to determine the location and severity of congestion along corridors in the MPO area. A number of MPO staff and volunteers were recruited to drive on the minor and major arterials leading into downtown Lexington. In order to get an average weekday measurement, MPO staff and volunteers had a number of restrictions on when they could and couldn't drive their routes. They drove in fair weather, Mondays thru Thursdays, during rush hours, avoiding construction, accidents and special events. This meant that they drove during the "average worst case" rush hours when there was nothing abnormally increasing or decreasing congestion. They drove for ten mornings and evenings, so that the average commute for the given routes could be derived.

The surveyors and equipment captured the following data: date, time, latitude, longitude and altitude. From this information it was possible to calculate the following: distance traveled, elapsed time, speed, cumulative distance and cumulative time. When these points were plotted on a map, one could tell where they were relative to cross streets. All of the data together made it possible to determine the location and length of delays. When the data from all ten morning runs was combined and plotted against the cumulative distance, it was possible to calculate the average speed over quarter mile distances. This was also true for the evening runs.

It was therefore possible to quantify areas of congestion. Congestion categories were based on average speeds ranked by three levels:

|           | Average Level      |
|-----------|--------------------|
| Speed     | of Congestion      |
| 20-30 mph | Congested          |
| 10-20 mph | Very Congested     |
| 0-10 mph  | Severely Congested |

Throughout the field of transportation planning and operations, there is an emerging consensus that travel time is the most meaningful measure of congestion. To obtain these travel times the MPO determined that the use of GPS technology would yield the best information for the money available. This research will provide data for various projects including travel demand forecasting, traffic signal timing and phasing as well as the Congestion Management System. This will be a continuing effort with biannual reports such as this one.

These studies were conceived in the spring of 2001 to evaluate the effects proposed signalization improvements would have on New Circle Road and Man o' War Boulevard.<sup>4</sup> Since then the scope has widened to cover most of the arterials emanating from downtown to the suburbs (see Figure 4.20).

| Route1                       | <u>Begin</u>        | <u>End</u>            |
|------------------------------|---------------------|-----------------------|
| Harrodsburg Rd.              | Maxwell St.         | Man o' War Blvd.      |
| Leestown Rd.                 | Jefferson St.       | Masterson Station Dr. |
| Portions of Man o' War Blvd. | Alumni Dr.          | I-75                  |
| Portions of New Circle Rd.   | Woodhill Dr.        | Boardwalk             |
| Newtown Pike                 | Main St.            | I-75/I-64             |
| Nicholasville Rd.            | Avenue of Champions | Man o' War Blvd.      |
| North Broadway               | Main St.            | I-75/I-64             |
| Richmond Rd.                 | Main/Vine           | Man o' War Blvd.      |
| Tates Creek Rd.              | Ashland Ave.        | Man o' War Blvd.      |
| Versailles Rd.               | High/Maxwell St.    | Man o' War Blvd.      |
| Winchester Rd.               | Main St.            | I-75                  |

<sup>4</sup> New timing plans are being developed for sections of Newtown Pike, Nicholasville Rd., and Tates Creek Rd. and Harrodsburg

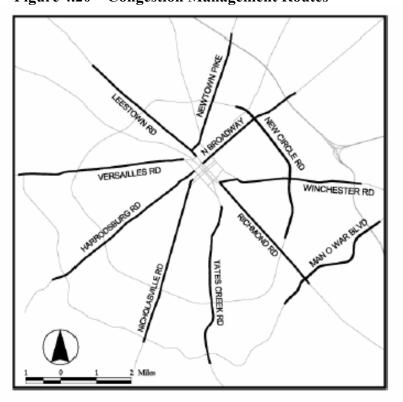


Figure 4.20 – Congestion Management Routes

This system can also provide information on intersection delay. For example, it can provide information on the probability on being stopped and the amount of time that one can expect to be delayed if stopped. This portion of the report also deals with the components of Travel Time. Simply put:

### Travel Time = Driving time + Intersection Delay + Other Delay

"Driving time" is the time it would take to travel the route doing the posted speed limit. The "intersection delay" is the average elapsed time spent delayed at intersections and "other delay" is the delay caused by other factors such as turning movements.

The relationship of Travel Time to Driving Time can be expressed as Travel Time divided by Driving Time, and is called the *Travel Rate Index (TRI)*. The Texas Transportation Institute (TTI) developed this concept as away to measure congestion. This measure is used as a way of comparing the amount of congestion on different routes. TRIs for Lexington MPO area arterials are shown in Figure 4.20. The higher the TRI is, the worse the congestion. Figure 4.21 gives the TRI for routes covered by the study by time of day and, in some cases, direction (inner or outer).

Figure 4.21

|                  |      |                    |       |       | Travel Rate |
|------------------|------|--------------------|-------|-------|-------------|
|                  | Rank | Street             |       | AM/PM | Index       |
| Worst            | 1    | New Circle Road    | Outer | PM    | 2.81        |
|                  | 2    | Nicholasville Road |       | PM    | 2.79        |
|                  | 3    | New Circle Road    | Inner | PM    | 2.72        |
|                  | 4    | Harrodsburg Road   |       | PM    | 2.66        |
|                  | 5    | New Circle Road    | Outer | Noon  | 2.59        |
|                  | 6    | New Circle Road    | Inner | Noon  | 2.54        |
|                  | 7    | Man o War          | Outer | PM    | 2.43        |
|                  | 8    | New Circle Road    | Outer | AM    | 2.16        |
|                  | 9    | Man o War          | Inner | PM    | 2.14        |
|                  | 10   | New Circle Road    | Inner | AM    | 2.12        |
|                  | 11   | Newtown Pike       |       | AM    | 2.07        |
|                  | 12   | Tates Creek Road   |       | PM    | 1.95        |
|                  | 13   | Man o War          | Inner | AM    | 1.88        |
|                  | 14   | Man o War          | Outer | Noon  | 1.88        |
|                  | 15   | Richmond Road      |       | PM    | 1.84        |
|                  | 16   | Winchester Road    |       | PM    | 1.82        |
|                  | 17   | Harrodsburg Road   |       | AM    | 1.81        |
|                  | 18   | North Broadway     |       | PM    | 1.81        |
|                  | 19   | Nicholasville Road |       | AM    | 1.80        |
|                  | 20   | Man o War          | Outer | AM    | 1.79        |
|                  | 21   | Winchester Road    |       | AM    | 1.76        |
|                  | 22   | Tates Creek Road   |       | AM    | 1.74        |
|                  | 23   | Man o War          | Inner | Noon  | 1.67        |
|                  | 24   | Newtown Pike       |       | PM    | 1.67        |
| 25               |      | North Broadway     |       | AM    | 1.63        |
| 26               |      | Richmond Road      |       | AM    | 1.52        |
| 27 Leestown Road |      | Leestown Road      |       | AM    | 1.51        |
|                  | 28   | Leestown Road      |       | PM    | 1.45        |
| <b>↓</b>         | 29   | Versailles Rd      |       | AM    | 1.42        |
| Best             | 30   | Versailles Rd      |       | PM    | 1.27        |

Beginning in the fall of 2003 and continuing in the spring of 2004, volunteers were measuring the congestion on the arterials of Lexington again. This time, however, routes into northern Jessamine were also measured. The equipment was also new. Instead of the Palm Pilot/GPS combinations, a device called a "Geologger" was employed. A Geologger is a combination of a GPS receiver and a data storage device. Also, ArcView Geographic Information System Software is now employed to analyze congestion instead of manual calculations. At the time this plan was written, work on the part of the second data collection had not progressed to the point of analysis. The information gathered and analyzed will be presented in a future report.

There are two forms of congestion, recurring and non-recurring. The work above addresses recurring congestion. Such things as accidents and construction cause non-recurring congestion. In order to address this, accident data is being incorporated into the Congestion Management System. The LFUCG Division of Police is providing comprehensive accident data and the LFUCG Geographic Information System Section is geo-coding it. This will enable us not only to accurately locate accidents but also to identify the time periods when the accidents occurred.

### **CHAPTER 4 – PLAN DEVELOPMENT**

This broad range of data analysis will enhance and strengthen the Lexington Area MPO Congestion Management System.

Another important initiative that the MPO has undertaken in coordination with LFUCG Divisions of Engineering, LFUCG Traffic Engineering, KYTC, and Jessamine County partners is a "Congestion Management Study." A consultant has been selected to study a number of arterials identified by the Lexington Area MPO Congestion Management System as currently experiencing heavy congestion. The first step in the process is to develop criteria or a "filter" to analyze collected transportation data. The purpose of the criteria (or filter) will be to identify which of available congestion management techniques (or tools) are best to apply to unique situations that may occur along congested arterials. The second phase of the study is to use/apply the developed criteria methodology to identify and recommend a prioritized list of the best congestion management techniques to apply to the selected MPO arterials. Finally, the study will have an emphasis on where and if "reversible lane operations" can be applied to any of the selected MPO arterials. The selected arterials include:

- Harrodsburg Road / South Broadway
- Man o' War Boulevard
- Newtown Pike
- South Limestone / Nicholasville Rd
- North Broadway
- Richmond Road
- Winchester Road

The Staff will parallel this effort with work on:

- Alumni Drive
- Clays Mill Road
- Leestown Road
- Tates Creek Road
- Versailles Road

These two efforts will yield a prioritized list of recommended congestion management projects that will ease congestion in the MPO area. The projects will feed into the Long Range Transportation Plan, State Six Year Plan and the Transportation Improvement Program.

# Title VI of Civil Rights Act of 1964:

A critical concern in developing the long-range transportation plan must be the equitable distribution of transportation projects, programs, services, facilities, impacts and all other transportation resources within the community. This should be with regard to income, race, and other socio-economic factors, in addition to geographic distribution. The following maps (Figure 4.22 and Figure 4.23), created using the 2000 Census data show the geographic distribution of income levels and minority populations within the Lexington MPO area.

As part of the effort to ensure environmental justice, the MPO has worked hard to include members of the minority community and low-income groups in the decision-making process. The Year 2000 Census found that 13.4 % of the Fayette County population was African American, 3.3% Hispanic and 2.5% Asian. The most significant change since 1990 has been the growth of the Hispanic population. Contacts in the minority community as well as media serving these groups are included in all public participation notification. Similarly, the MPO strives to include the elderly and disabled population in planning efforts, as well as residents of both Fayette and Jessamine Counties. Input from all segments of the population and all neighborhoods in the community are critical to effective transportation planning.

Many MPO's across the United States have been unclear on just how to go about addressing Environmental Justice issues within their study areas. To achieve a good assessment of Environmental Justice Issues within the

Figure 4.22 – Minority Population of the Lexington MPO Area

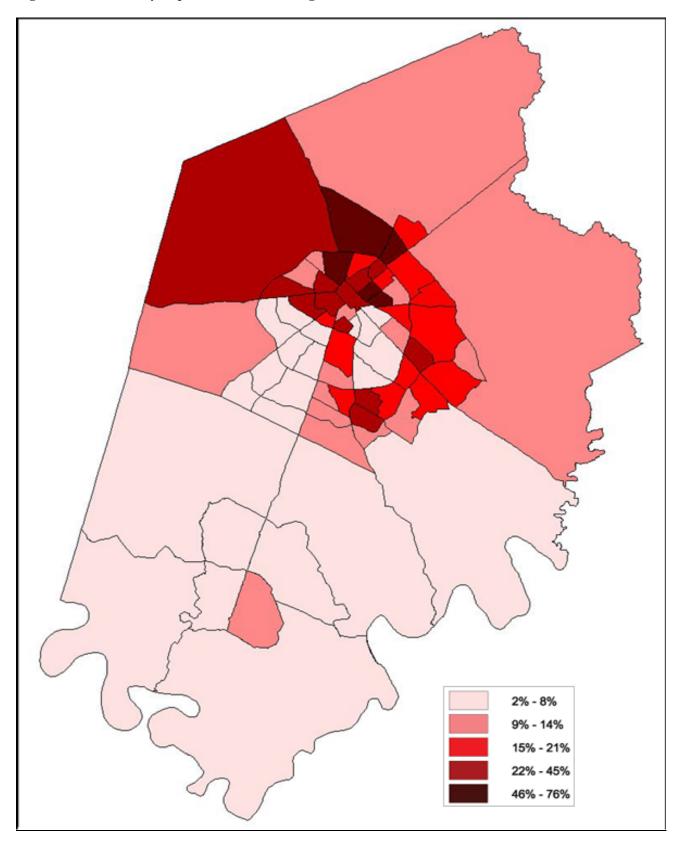
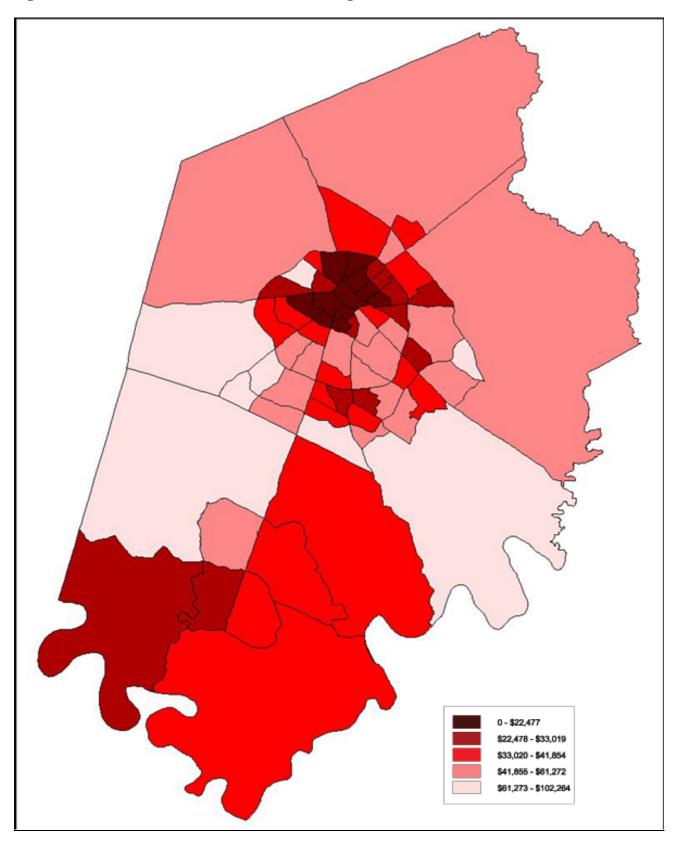


Figure 4.23 – Median Household Income of the Lexington MPO Area



### **CHAPTER 4 – PLAN DEVELOPMENT**

Lexington MPO Area, the Lexington MPO has joined with the University of Kentucky's Transportation Research Center, the Kentucky Transportation Cabinet, and the University of Louisville to undertake an Environmental Justice Study. After much groundwork, this study began in early 2004 and should be completed by late 2004. Study elements will include an extensive literature/plan review of United States MPO's and how they have addressed Environmental Justice issues within their areas, geographic analysis of low income and minority groups within the Lexington Area MPO, and the level of access for these groups to community services and resources currently and in future plan years. The full report will be produced and results used to help guide and develop all Lexington Area MPO plans. This proactive and coordinated approach will enable the Lexington Area MPO to be a leader in Environmental Justice assessment and establish methods and criteria to evaluate Environmental Justice within the Lexington MPO Area and other MPO areas in the future.

In an effort to reach as many different segments of our community as possible, the MPO uses the extensive LFUCG Neighborhood Association database to contact all neighborhoods in Fayette County. Also, the MPO continually works/coordinates with the LexTran Transit Authority that serves environmental justice groups extensively; for example, the MPO endorsed a referendum to put a transit dedicated property tax on the November 2004 ballot; also, the MPO participated in the 2003/2004 LexTran Strategic Planning/Visioning process.

Finally, the Lexington Area MPO has been heavily involved with the Newtown Pike Extension Project Small Area Plan and Environmental Assessment. This project has taken on unprecedented levels of consideration of preserving quality of life, minimizing negative impact, improving access, and creating new and better enhancements for the existing neighborhoods. Extensive coordination and cooperation between federal, state, and local agencies, neighbors, and other groups and individuals has been a highlight of the process.

### **CHAPTER 5**

# PLAN RECOMMENDATIONS

### INTRODUCTION

This chapter describes recommended and adopted plans for the various elements that make up the Lexington Area Long-Range Transportation Plan (e.g., highway, transit, bicycle, pedestrian, etc.). Plan recommendations include funding sources, project descriptions, phasing, discussions on changes, and other useful information. The Transportation Policy Committee met on June 4<sup>th</sup>, 2004 to adopt the *Year 2030 Long-Range Transportation Plan*. Throughout the plan update process, the Transportation Policy Committee reviewed MPO staff recommendations, reports, and citizen input received through MPO public involvement efforts. The plan recommendations presented here are a product of the on-going and multi-faceted Lexington Area MPO transportation planning process at this point in time; a static view of a dynamic and ever-changing process contingent on many stakeholders, decision-makers and budgetary authorizations. Until a Transportation Reauthorization Bill is passed by Congress the fiscal portions of this Plan are based on past historical data. When the Transportation Bill is passed the fiscal portions might have to be amended to reflect the actual funding availability.

The Lexington Area Year 2030 Long Range Transportation Plan recommendations are presented within the following elements:

- 1. Recommended FY 2005—2010 Kentucky Six-Year Highway Plan (anticipated funding)
- 2. Plan for Implementing Surface Transportation Program (STP) SLX Projects (Lexington MPO Area funding)
- 3. Plan for Implementing Surface Transportation Program (STP) Non-SLX Projects (Federal or State funding)
- 4. Transit Element
- 5. Mobility Element
- 6. Bicycle & Pedestrian Element

A more detailed description of these elements follows.

### FUNDING ANALYSIS AND FINANCIAL PLAN

This section provides an overview of the financial costs associated with the plan's recommended programs and projects in the 2030 Long-Range Transportation Plan and an estimate of the revenues that will be used to finance the improvements or enhancements. A transportation funding analysis was performed and a financial plan developed to illustrate the Lexington Area MPO's consistency of proposed transportation investments with already available and projected sources of federal, state and local revenue. MPO staff coordinated these programming efforts with federal, state, and local transportation agencies to develop the financial plan. The financial plan compares the estimated revenue from existing and proposed funding sources that can reasonably be expected to be available for transportation uses, and the estimated costs of constructing, maintaining and operating the total (existing plus planned) transportation system over the 26-year period of the plan. The estimated revenue for fiscal year 2005 through fiscal year 2010 closely adhered to the Kentucky Transportation Cabinet's Recommended 2005--2010 Six-Year Plan. The program's direct and indirect economic impacts are substantial and spillover into many sectors of the local and regional economy.

The estimated SLX and Non-SLX funding programs have been accounted for in detail to provide a "program funding snapshot" in a dynamic process. Changes in the economy and future political decisions will determine future funding for highway and safety programs, and funding for public transportation programs. The MPO supports and encourages increases in all funding programs that efficiently and effectively implements an "integrated intermodal transportation system that facilitates the efficient movement of people and goods." Enhanced mobility should equate to opportunities for all citizens to live a better life and enjoy a higher standard of living. An integrated transportation network that builds into a truly regional, state and national transportation

system is a long-range direction provided by federal law (23 CFR 450.322) and will remain a challenge to all present and future stakeholders. The disabled, the elderly, the young, and the socioeconomic disadvantaged, have special transportation needs now and in the future.

The SLX program funds available for transportation programs/projects have been balanced and are fiscally constrained; the funding amount programmed for programs/projects closely balances the year to year funding expected from all revenue sources to be received. Non-SLX funding programs, STP and other, are programmed as far into the future as planners can realistically program. Any potential new revenues and/or revenue sources to cover shortfalls shall be identified by the MPO as applicable, including strategies for ensuring their availability for proposed investments. The Plan identifies existing and proposed revenues for anticipated capital, operating expenses, and maintenance costs. Estimated Non-SLX costs and revenue projections are based on the most current data available and reflect the existing appropriations and past historical funding trends. A consideration of the financial plan is the strategy required for the implementation of programs and projects to reach air quality compliance.

Since this is a long-range system level plan, the project costs and most of the revenue projections are best estimates. The intent is to prepare an approximate, but realistic, estimate of total project/program costs; and a similar estimate of total revenues that the Lexington Area MPO can expect to receive over the next 25 years. A key goal of this process is to prepare a 'financially constrained plan' whose costs can to be paid from the 26-year revenue stream.

As required by TEA-21, the 2030 Long-Range Transportation Plan focuses on financially feasible transportation projects. Kentucky's Recommended Six-Year Plan (FY 2005—FY 2010) has provided project phasing for committed future projects in the Lexington MPO area. This does not imply, however, that Plan's goals and objectives should be limited. By emphasizing financially achievable projects, the Plan offers opportunities to specify further system and operational improvements given additional resources. The Kentucky FY 2005—FY 2010 Recommended Six-Year Highway Plan was developed to assess projects by "value, need, and service."5

To ensure that the plan is fiscally constrained, it is necessary to closely examine the relationship between the funds we expect to receive (revenues) and what we plan to spend on transportation improvements between now and the year 2030 (expenditures).

### **CAPITAL COSTS & PROJECTED REVENUES**

### **CAPITAL COSTS**

The estimated capital cost of implementing the 2030 Long-Range Transportation Plan is approximately \$570 million. Updated cost estimates have been prepared for this plan by state and local engineers based upon the latest techniques and information available. Estimates are prepared for preliminary design, design, right-of-way, utilities, construction, and operation phases. Some cost estimates are derived from up to date planning studies conducted specifically for the respective projects, an example being the "Congestion Management Study."

The transit program is estimated to cost \$8 million dollars a year in funding and includes recent change in services as recommended in the LexTran Visioning Strategy. The transit program represents a small percentage of the entire MPO two-county transportation plan. The MPO long-range transportation plans encourage the increased usage and enhancement of mass transit. Future funding for mass transit needs are critical to relieving traffic congestion and improving air quality.

#### PROJECTED REVENUES

The following funding projections are based on data from the current KYTC 2005-2010 Six Year Highway Plan and consultations with the Kentucky Transportation Cabinet.

<sup>&</sup>lt;sup>5</sup> Foundations Principles for KYTC's Project Selection Process, KYTC, February 19, 2004

# **Anticipated Funding Sources for Maintenance and System Preservation**

- Congestion Mitigation and Air Quality Program (CMAQ)
- National Highway System Program (NHS)
- Interstate Maintenance Program (IM)
- Transportation and Community and System Preservation Pilot Program (TCSP)

# **Anticipated Funding Sources for Major Transportation Projects**

- National Highway System Program (NHS)
- Federal Surface Transportation Program (STP)
- Federal Surface Transportation Program, Lexington (SLX)
- State Projects (SP)

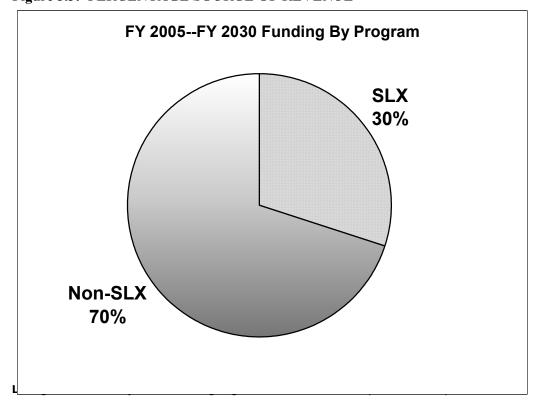
Figure 5.1: LEXINGTON AREA MPO ESTIMATED ANNUAL FUNDING LEVELS (Estimates provided by KYTC and are subject to change pending approval and authorization)

| FUNDING CATEGORIES                          |        | ESTIMATED LEXINGTON MPO TOTALS (Millions) |
|---|--------|---|
| Federal Surface Transportation Program      | STP    | 6.0                                       |
| Federal Surface Transportation Program, Lex | SLX    | 5.8                                       |
| National Highway System                     | NH     | 4.0                                       |
| State Projects                              | SP     | 7.2                                       |
| Congestion Mitigation and Air Quality       | СМ     | 1.3                                       |
|   | Totals | 24.3                                      |

Figure 5.2: SUMMARY OF REVENUES AND COSTS THROUGH 2030 (Provided by Lexington MPO)

| <b>Source</b> | <b>Expenditures</b> | Revenues      |
|---------------|---------------------|---------------|
| SLX           | \$171,416,435       | \$171,416,435 |
| Non-SLX       | \$413,152,274       | \$413,152,274 |
| Total         | \$584,568,709       | \$584,568,709 |

Figure 5.3: PERCENTAGE SOURCE OF REVENUE



#### TRANSIT FINANCIAL NEEDS

As this plan update process has been carried out, LexTran and various community stakeholders have carried out a "Visioning Process" to develop a Five (5)-Year Strategic Plan for the transit system. LexTran (with assistance from consultants, the University of Kentucky Transportation Research Center, the MPO, and others) has conducted extensive data collection and analysis, surveys, interviews, meetings, presentations, and discussions with the public. LexTran has involved transit users, LexTran employees, LFUCG agencies, KYTC agencies, and many other community transit stakeholders.

The Preliminary LexTran Vision & Plan include the following key elements:

- Restore service eliminated (Sunday, Peak, and Night)
- Ensure UK Service continues operating
- Improve Service to 15-minute headways during the peaks (6 a.m. to 9 a.m. and 4 p.m. to 6 p.m.) and 30 minutes during non-peak.
- Provide hourly service on weekends
- Based on dollars generated, explore other service types, i.e. express service, circulators, bus
  rapid transit, transit centers or transit stations strategically located, service analysis and planning
  to serve other areas that have need/demand.

LexTran Operating budgets for the past three years are as follows:

- FY-2002 = \$7,995,000
- FY-2003 = \$9,292,000
- FY-2004 = \$9,103,000

LexTran has been experiencing a 15% annual increase in the cost of doing business. Deficits in funding and expiring federal Congestion Mitigation Air Quality grants (CMAQ-\$2.3 million) create a current situation that demands additional undesirable cuts to service that (as of April, 2004) include reduction in service to the University of Kentucky, possible Saturday service elimination, a more possible cuts. Service cuts reflect levels lower than 12 years ago.

It is clear that LexTran must pursue additional funding to maintain existing service and provide additional needed service to currently un-served areas within the Lexington area. To achieve this, LexTran is seeking additional LFUCG funding and a dedicated source of funding such as some method of tax. Many cities across the United States have such a dedicated tax to support their transit systems. It is important to that all stakeholders discover/determine the best method of dedicated funding that will gain the support of the community. Studies conducted by the University of Kentucky Transportation Center show that for every one dollar invested in transit in Lexington, there is a \$3.80 return in benefits that include transportation benefits to riders and non-riders, lost wage and mobility benefits to riders, benefits to the general public (congestion, pollution, road maintenance), and impacts to the local economy.

Major challenges are faced in passing a levy in 2004 include: Presidential election years are generally not as positive for tax levies, there is usually larger voter turnout and more opposition to tax increases, current political climate in the state is less than conducive to additional taxes, LexTran is still suffering from a less than positive image, service cuts may have negative impact on our image and support, LexTran has not had an ongoing education/community outreach effort to promote transit and its benefits to the local community.

If LexTran is not successful to place a tax levy on the ballot in 2004, then it is extremely important for the area to work hard to improve actual service on the street, focus on education/community outreach, and therefore improve the overall transit image and increase support from key stakeholders and the community. LexTran and all stakeholders started this work in earnest in 2003 and have made great

progress. It is apparent that there is a coordinated and dedicated effort among state, federal, local, LexTran and other stakeholders underway at a level that has not occurred in the past. This effort is to support and enhance all aspects of the Lexington area transit system.

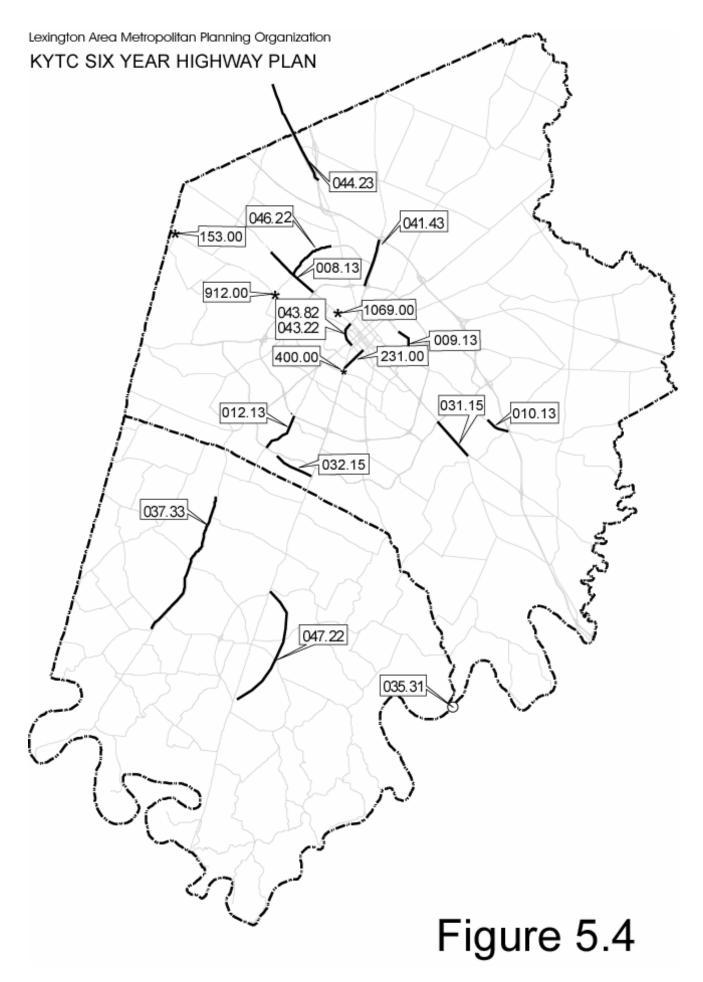
Other alternatives to raise revenues for the Lexington Area transit system include:

- Seek other available grant funding
- Work with the University of Kentucky to initiate a student fee for transit service
- Provide charter and shuttle services (within federal guidelines)
- Increase transit advertising
- Pursue bus shelter advertising
- Increase fares
- Pursue Public Private Partnerships

The Lexington Area MPO has been, and will continue to be dedicated in its process to assist and support the Lexington transit system as a basic and vital element to the MPO area transportation system.

# STATE SIX-YEAR HIGHWAY PLAN FY 2005 – 2010

The six-year plan is developed by the Kentucky Transportation Cabinet and revised every two years to coincide with the Kentucky State Legislative session. The Kentucky Transportation Cabinet uses the project lists from the rural counties and the Transportation Improvement Programs (TIP) from areas with MPO's to develop this document. Since the MPO's now have greater authority than ever before, the KYTC State Six-Year Plan and the TIPs must be in agreement. Since the TIP is a subset of the MPO long-range plan, the source of all TIP projects must be the MPO long-range transportation plan. The current KYTC State Six-Year Plan contains projects for this MPO area based upon the previous TIP and more importantly, the Year 2025 Long-Range Transportation Plan that was superseded by the Year 2030 Long Range Transportation Plan. During the plan update process, the projects found in the KYTC State Six-Year Plan were tested to confirm their continued validity. All projects within the MPO area included in this plan and not yet implemented were found to be necessary to reduce traffic congestion and to improve air quality. Therefore, the Year 2030 Long-Range Transportation Plan includes all KYTC State Six-Year Plan projects for Fayette and Jessamine Counties. Since this accounts for the fiscal years 2004 through 2010 the rest of the Year 2030 Long-Range Transportation Plan picks up where the six-year plan leaves off. An exception to this is that this six-year plan does not contain a schedule of SLX funded projects. SLX funds are represented as "Dedicated Federal-Aid STP Funds Earmarked for the Lexington Urbanized Area and Subject to MPO Control" in the six-year plan. Figure 5.4 depicts six-year plan projects proposed by the Year 2030 Long-Range Transportation Plan.



#### HIGHWAY ELEMENT

The project selection and prioritization process for the *Year 2030 Long-Range Transportation Plan* was simplified since the last plan. While some community project priorities have changed, most all of the projects, that have not been implemented, are still valid. The staff analysis of anticipated roadway deficiencies in the future transportation system reinforced the list of proposed projects from the previous *Year 2025 Long-Range Transportation Plan*. Input was received from the members of the Transportation Technical Coordinating Committee (TTCC) and the Transportation Policy Committee (TPC), which served to adjust "technical" project priorities.

Because of higher anticipated funding, the *Year 2025 Long-Range Transportation Plan* addressed nearly all identified deficiencies within the planning period. During this plan update process, some new future year transportation system deficiencies emerged with the introduction of newly developed 2025 socioeconomic data. Also, a significant decrease in anticipated funding allowed only the most important projects to be proposed for implementation in *Year 2030 Long-Range Transportation Plan*. While many projects from the 2025 plan are currently being implemented, the greater issues of the previous 2025 plan are continuing to be addressed effectively in this new plan.

The following is a summary of the existing and carry-over highway projects and their current status in this plan update:

Figure 5.5 - FEDERAL AID PROGRAMS AND PROJECTS Please see project details in tables provided.

| FUNDING PROGRAMS  | Type of Program/Project | Program Fund Source<br>Document | Carry-Over<br>from 2025 Plan | Map ID # |
|---|-------------------------|---------------------------------|------------------------------|----------|
| SLX CONTINUING PROGRAMS   |                         |                                 |                              |          |
| Lexington Bluegrass Mobility Office   | Continuing Program      | TIP & Six-Year Plan             | Yes                          | NA       |
| Air Quality Planning  | Continuing Program      | TIP & Six-Year Plan             | Yes                          | NA       |
| Lexington Traffic Signal Upgrades   | Continuing Program      | TIP & Six-Year Plan             | Yes                          | NA       |
| ITS/CMS Improvements  | Continuing Program      | TIP & Six-Year Plan             | Yes                          | NA       |
| SLX ROADWAY PROJECTS  |                         |                                 |                              |          |
| Leestown Rd. (New Circle Rd. to Masterson Park)                             | Road Widening           | TIP & Six-Year Plan             | Yes                          | 1        |
| Liberty KY-1927/Todds Rd Cadentown Bypass                                   | Road Widening           | TIP & Six-Year Plan             | No                           | 2        |
| Liberty/Todds Rd. (0.2 miles South of Andover Forest Dr. to I-75) Section 2 | Road Widening           | TIP & Six-Year Plan             | Yes                          | 3        |
| Clays Mill Road (Harrodsburg Rd. to New Circle Road)<br>Section 1           | Road Widening           | TIP & Six-Year Plan             | Yes                          | 4        |
| Clays Mill Road (New Circle Road to Man o' War Blvd.) Section 2             | Road Widening           | TIP & Six-Year Plan             | Yes                          | 5        |
| Fayette Mall Road (Man o' War Blvd. to West Reynolds Rd)                    | New Roadway             | 2030 PLAN                       | Yes                          | 6        |
| Starshoot Parkway (Connection to Liberty Rd.)                               | New Roadway             | 2030 PLAN                       | Yes                          | 7        |
| Man o' War Boulevard (I-75 to Richmond Road)                                | Road Widening           | 2030 PLAN                       | Yes                          | 8        |
| Alumni Drive (Edgewater Drive to Man o' War<br>Boulevard)                   | Road Widening           | 2030 PLAN                       | Yes                          | 9        |
| Man o' War Blvd. (Richmond Rd. to Armstrong Mill Rd.)                       | Road Widening           | 2030 PLAN                       | Yes                          | 10       |
| Liberty Road (New Circle Road to Church of God)                             | Road Widening           | 2030 PLAN                       | Yes                          | 11       |
| Loudon Avenue (Russell Cave Road to Oakhill Drive)                          | Road Improvements       | 2030 PLAN                       | Yes                          | 12       |
| Russell Cave Road - Park Place to North Broadway                            | Road Widening           | 2030 PLAN                       | Yes                          | 13       |
| Parkers Mill Rd. (Versailles Rd. to Man o' War Blvd.)                       | Road Widening           | 2030 PLAN                       | Yes                          | 14       |

| FUNDING PROGRAMS   | Type of Program/Project      | Program Fund Source<br>Document            | Carry-Over<br>from 2025 Plan | Map ID# |
|--|------------------------------|--|------------------------------|---------|
| Todds Rd. (Codell Drive to Man o"War Boulevard)                              | Road Widening                | 2030 PLAN                                  | Yes                          | 15      |
| Alumni Dr. (Nicholasville Rd. to Chinoe Rd.)                                 | Road Widening                | 2030 PLAN                                  | Yes                          | 16      |
| Brannon Road (US 68 to US 27)  | Road Widening                | 2030 PLAN                                  | Yes                          | 17      |
| Man o' War Blvd. (Armstrong Mill Rd. to Tates Creek Rd.)                     | Road Widening                | 2030 PLAN                                  | Yes                          | 18      |
| Man o' War Blvd. (Tates Creek Rd. to Nicholasville Rd.)                      | Road Widening                | 2030 PLAN                                  | Yes                          | 19      |
| Man o' War Boulevard (I-75 to Winchester Rd.)                                | Road Widening                | 2030 PLAN                                  | Yes                          | 20      |
| TE - FEDERAL TRANSPORTATION ENHANCEM   | ENT                          |  |                              |         |
| South Elkhorn Trail (Nicholasville Rd. to Grassy Creek Rd)                   | Greenway Trail               | TIP & Six-Year Plan                        | Yes                          | 21      |
| NON-SLX AND OTHER  |                              |  |                              |         |
| IMFEDERAL INTERSTATE MAINTENANCE PF  | ROJECTS                      |  |                              |         |
| IMFederal Interstate Maintenance   | Pavement Rehabilitation      | TIP & Six-Year Plan                        | Yes                          | 22      |
| NHFEDERAL NATIONAL HIGHWAY SYSTEM  | PROGRAM                      |  |                              |         |
| NHFederal National Highway System ProgramKY                                  |                              |  |                              |         |
| 922 Newtown Pike   | Minor Widening               | TIP & Six-Year Plan                        | Yes                          | 23      |
| HBPHIGHWAY BRIDGE PROGRAM  |                              |  |                              |         |
| BRXBridge Replacement over Boone Creek (C10) @ the Clark County Line (SR-62) | Minor Widening               | TIP & Six-Year Plan                        | No                           | 24      |
| STPFEDERAL SURFACE TRANSPORTATION P  | ROGRAM PROJECTS              |  |                              |         |
| Citation Boulevard - Phase II (Southern RR to Leestown Rd.)                  | New Roadway                  | TIP & Six-Year Plan                        | Yes                          | 25      |
| Newtown Pike Extension   | New Roadway                  | TIP & Six-Year Plan                        | Yes                          | 26      |
| Viley Road Extension- Phase II (Southern RR to                               | N. D. I.                     | TID 0 C. W Di                              | W                            | 27      |
| Leestown Rd.)  | New Roadway                  | TIP & Six-Year Plan                        | Yes                          | 27      |
| East Nicholasville Bypass (Section Phase I)                                  | New Roadway                  | TIP & Six-Year Plan                        | Yes                          | 28      |
| Georgetown Rd. US-25 (Spurr Road to Etter Ln.)                               | Road Widening                | 2030 PLAN                                  | Yes                          | 29      |
| SPSTATE CONTINUING PROGRAMS  |                              |  |                              |         |
| Operation of Valley View Ferry at KY River                                   | Continuing Program           | FY 05-08 TIP, Six-Year<br>Plan & 2030 LRTP | Yes                          | 30      |
| SPSTATE PROJECTS   |                              |  |                              |         |
| Harrodsburg Rd. US-68 ( New Circle Rd. to Man o'War                          |                              |  |                              |         |
| Boulevard) Harrodsburg Rd. US-68 (KY 29 to Brannon Rd.)                      | Road Widening  Road Widening | TIP & Six-Year Plan TIP & Six-Year Plan    | Yes<br>Yes                   | 31      |
| manousumg Ku. US-00 (K i 27 to Diamion Ku.)                                  | Noau wideling                | 111 & Six-1 cai Pian                       | 1 08                         | 34      |
| HPP HIGH PRIORITY PROJECTS   | T                            |  | Γ                            |         |
| Liberty KY-1927/Todds Rd Cadentown Bypass                                    | Road Widening                |  | Yes                          | 33      |

| FUNDING PROGRAMS   | Type of Program/Project | Program Fund Source<br>Document | Carry-Over from 2025 Plan | Map ID# |
|--|-------------------------|---------------------------------|---------------------------|---------|
| HESFEDERAL HAZARD ELIMINATION SAFET  | Y PROJECT               |                                 |                           |         |
| Intersection of KY 1681 and Alexandria Drive at west                       |                         |                                 |                           |         |
| urban boundary   | Safety Project          |                                 | No                        | 34      |
| STPPROJECT FUNDING PENDING   |                         |                                 |                           |         |
| Nicholasville Rd. US-27 (Southland Drive to New                            |                         |                                 |                           |         |
| Circle Rd.)  | Road Widening           | 2030 PLAN                       | Yes                       | 35      |
| Nicholasville Rd. US-27 (New Circle Rd. to Man o'War                       | 510.00 11.000           |                                 |                           |         |
| Boulevard)   | Road Widening           | 2030 PLAN                       | Yes                       | 36      |
| Nicholasville Rd. US-27 (Man o'War Boulevard to                            |                         |                                 |                           |         |
| Nicholasville Bypass)  | Road Widening           | 2030 PLAN                       | Yes                       | 37      |
| Winchester Rd. US-60 (Midland Avenue to New Circle                         |                         |                                 |                           |         |
| Rd)  | Road Widening           | 2030 PLAN                       | Yes                       | 38      |
| Newtown Pike US-25/KY-922 (Main Street to New                              |                         |                                 |                           |         |
| Circle Rd.)  | Road Widening           | 2030 PLAN                       | Yes                       | 39      |
| New Circle Rd NE KY-4 (Georgetown Rd. to Richmond                          |                         |                                 |                           |         |
| Rd) Signalized Portion   | Road Widening           | 2030 PLAN                       | Yes                       | 40      |
| New Circle Rd. KY-4 (Richmond Rd. to Nicholasville                         |                         |                                 |                           |         |
| Rd.) In Expressway Portion   | Road Widening           | 2030 PLAN                       | Yes                       | 41      |
| Harrodsburg Rd. US-68 (Mason Headley Rd. to New                            |                         |                                 |                           |         |
| Circle Rd.)  | Road Widening           | 2030 PLAN                       | Yes                       | 42      |
| Tates Creek Rd. KY-1974 (Malabu Drive to Armstrong                         |                         |                                 |                           |         |
| Mill Road)   | Road Widening           | 2030 PLAN                       | Yes                       | 43      |
| Tates Creek Rd. KY-1974 (Armstrong Mill Rd.to Man                          | D 1377.1 .              | 2020 DI ANI                     | 37                        | 4.4     |
| o' War Boulevard)  | Road Widening           | 2030 PLAN                       | Yes                       | 44      |
| Versailles Rd. US-60 (Woodford County Line to New Circle Rd.)              | Dood Widoning           | 2030 PLAN                       | Voc                       | 45      |
|  | Road Widening           | 2030 PLAN                       | Yes                       | 43      |
| Versailles Rd. US-60 (New Circle Rd. to Red Mile Rd.)                      | Road Widening           | 2030 PLAN                       | Yes                       | 46      |
| Keene Rd KY-169 (Harrodsburg Rd. to Nicholasville                          |                         |                                 |                           |         |
| Bypass)  | Road Widening           | 2030 PLAN                       | Yes                       | 47      |
| Keene Rd. KY-169 (Nicholasville Bypass to Oak St.)                         | Road Widening           | 2030 PLAN                       | Yes                       | 48      |
| KY-29 (Southern Railroad to Harrodsburg Rd.)                               | Road Widening           | 2030 PLAN                       | Yes                       | 49      |
| Spurr Rd. (Georgetown Rd. to Masterson Station<br>Residential Area Access) | Road Widening           | 2030 PLAN                       | Yes                       | 50      |

Figure 5.6 – 2030 Transportation Plan Funding Programs and Projects General Location Map

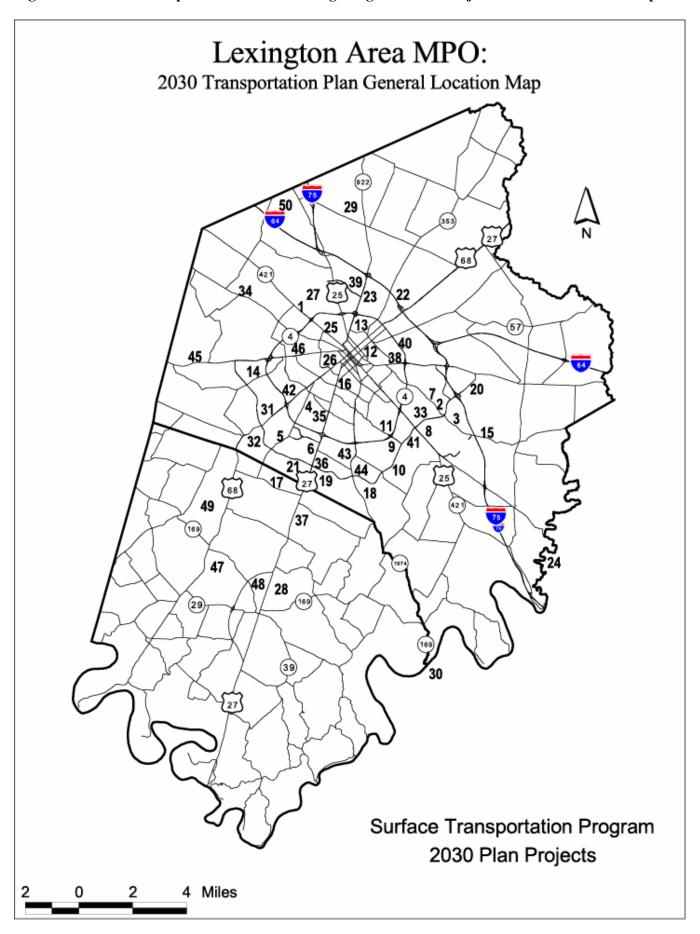


FIGURE 5.7 - STATUS OF 2030 VS 2025 PROGRAMS AND PROJECTS – PROGRAM/PROJECT CONTINUED, COMPLETED, OR DROPPED FROM PLAN

| PROGRAMS/PROJECTS  | STATUS            |
|--|-------------------|
| 2025 SLX Projects  |                   |
| Lexington Bluegrass Mobility Office                              | Program Continued |
| Air Quality Planning   | Program Continued |
| Lexington Traffic Signal Upgrades                                | Program Continued |
| TS/CMS Improvements  | Program Continued |
| Fayette Mall Road (Man o' War Blvd. to West Reynolds Rd)         | Project Continued |
| Brannon Road/Ashgrove Pike at Nicholasville (US-27)              | Project Continued |
| Harrodsburg Rd. (4800' South of Brannon Rd. to Man o' War Blvd.) | Project Continued |
| Leestown Rd. (New Circle Rd. to Masterson Park)                  | Project Continued |
| East Loudon Avenue (Oakhill Dr. to Winchester Rd.)               | Project Continued |
| Liberty/Todds Rd. (0.2 miles South of Forest Hill Dr. to I-75)   | Project Continued |
| Clays Mill Road (Harrodsburg Rd. to New Circle Road)             | Project Continued |
| Clays Mill Road (New Circle Road to Man o' War Blvd.)            | Project Continued |
| Liberty Road (New Circle Road to Church of God)                  | Project Continued |
| Loudon Avenue (Russell Cave Road to Oakhill Drive)               | Project Continued |
| Man o' War Boulevard (I-75 to Richmond Road)                     | Project Continued |
| Alumni Drive (Edgewater Drive to Man o' War Boulevard)           | Project Continued |
| Yellowstone Parkway (Mt. Tabor Rd. to Alumni Drive)              | Project Continued |
| Greendale Road (Leestown Road to Mercer Road)                    | Project Continued |
| Russell Cave Road - Park Place to North Broadway                 | Project Continued |
| Man o' War Blvd. (Richmond Rd. to Armstrong Mill Rd.)            | Project Continued |
| Parkers Mill Rd. (Versailles Rd. to Man o' War Blvd.)            | Project Continued |
| Fodds Rd. (Codell Drive to Man o"War Boulevard)                  | Project Continued |
| Man o' War Blvd. (Armstrong Mill Rd. to Tates Creek Rd.)         | Project Continued |
| Alumni Dr. (Nicholasville Rd. to Chinoe Rd.)                     | Project Continued |
| Man o' War Blvd. (Tates Creek Rd. to Nicholasville Rd.)          | Project Continued |
| Liberty Road (Winchester Rd. to Henry Clay Blvd.)                | Project Continued |
| Man o' War Boulevard (I-75 to Winchester Rd.)                    | Project Continued |
| ITS Public Transit Related                                       | Project Continued |
| Brighton Rail Trail (Man o'War Blvd. to Chilesburg Rd)           | Project Completed |
| Richmond Rd Multiuse Path (Prosperous Pl to Jacobson Pk)         | Project Completed |
| South Elkhorn Trail (Nicholasville Rd. to Grassy Creek Rd)       | Project Continued |

| Rose Street and Euclid Avenue Bike Lanes                                      | Project Continued |
|---|-------------------|
| 2025 Non-SLX Projects   |                   |
| Operation of Valley View Ferry at KY River                                    | Project Continued |
| Harrodsburg Rd. US-68 ( New Circle Rd. to Man o'War Boulevard)                | Project Continued |
| Harrodsburg Rd. US-68 (KY 29 to Brannon Rd.)                                  | Project Continued |
| Richmond Rd. US-25/421 (New Circle to Man o' War Bv)                          | Project Continued |
| -64, Lexington-Catlettsburg Rd. (I-75 to Rehab Section)                       | Project Completed |
| -64, Lexington-Catlettsburg Rd. (Rehab Section to Clark County Line)          | Project Completed |
| Newtown Pike KY-922 (New Circle Rd. to I-75)                                  | Project Continued |
| Liberty KY-1927/Todds Rd Cadentown Bypass                                     | Project Continued |
| Newtown Pike Extension  | Project Continued |
| Newtown Pike Extension  | Project Continued |
| Georgetown Rd. US-25 (I-75 to Etter Ln.)                                      | Project Continued |
| Harrodsburg Rd. US-68 (4800' South of Brannon Rd. to Man o' War Blvd.)        | Project Continued |
| Citation Boulevard - Phase II (Southern RR to Leestown Rd.)                   | Project Continued |
| East Nicholasville Bypass (Phase I)   | Project Continued |
| Nicholasville Rd. US-27 (Southland Drive to New Circle Rd.)                   | Project Continued |
| Nicholasville Rd. US-27 (New Circle Rd. to Man o'War Boulevard)               | Project Continued |
| Nicholasville Rd. US-27 (Man o'War Boulevard to Nicholasville Bypass)         | Project Continued |
| Winchester Rd. US-60 (Midland Avenue to New Circle Rd)                        | Project Continued |
| Newtown Pike US-25/KY-922 (Main Street to New Circle Rd.)                     | Project Continued |
| New Circle Rd NE KY-4 (Georgetown Rd. to Richmond Rd) Signalized Portion      | Project Continued |
| New Circle Rd. KY-4 (Richmond Rd. to Nicholasville Rd.) In Expressway Portion | Project Continued |
| Harrodsburg Rd. US-68 (Mason Headley Rd. to New Circle Rd.)                   | Project Continued |
| Tates Creek Rd. KY-1974 (Malabu to Armstrong Mill Rd.)                        | Project Continued |
| Tates Creek Rd. KY-1974 (Armstrong Mill Rd.to Man o' War Boulevard)           | Project Continued |
| Versailles Rd. US-60 (Woodford County Line to Red Mile Rd.)                   | Project Continued |
| Keene Rd KY-169 (Harrodsburg Rd. to Nicholasville Bypass)                     | Project Continued |
| Keene Rd. KY-169 (Nicholasville Bypass to Oak St.)                            | Road Widening     |
| CY-29 (Southern Railroad to Harrodsburg Rd.)                                  | Road Widening     |
| Spurr Rd. (Georgetown Rd. to Masterson Station Residential Area Access)       | Road Widening     |

### PLAN FOR IMPLEMENTING SLX PROJECTS:

Figure 5.8: PLAN FOR IMPLEMENTING SLX PROJECTS

# **SLX Continuing Programs**

| Lexington Bluegrass Mobility Office |   |        |           |              | Coi         | ntinuing Program |
|-------------------------------------|---|--------|-----------|--------------|-------------|------------------|
| MPO ID # KYTC ITEM # STATUS ROUTE   |   |        |           | PHASE        | ANNUAL COST | FISCAL YEAR      |
|                                     |   |        |           |              |             |                  |
| 001.11                              | 227.00  | ANNUAL | NA        | DESIGN       | \$ -        |                  |
|                                     |   |        |           | RIGHT OF WAY | \$ -        |                  |
|                                     |   |        | UTILITIES | \$ -         |             |                  |
|                                     | <b>TOTAL FUNDING 2005 to 2030:</b> \$ 3,292,500 |        |           |              | \$ -        |                  |
| Total Funding Var                   |   |        |           | OPERATIONS   | \$ 120,000  | 2005-2030        |

As the central point of contact for all inquiries concerning mobility issues, this office will serve as a broker and coordinator for, as well as the prime promoter of non-traditional services.

| Air Quality Plan  | ning   |                        |       | Coi          | ntinuing Program |             |
|-------------------|--|------------------------|-------|--------------|------------------|-------------|
| MPO ID #          | KYTC ITEM #                                    | STATUS                 | ROUTE | PHASE        | ANNUAL COST      | FISCAL YEAR |
|                   |  |                        |       |              |                  |             |
| 002.11            | 227.00   | ANNUAL                 | NA    | DESIGN       | \$ -             |             |
|                   |  |                        |       | RIGHT OF WAY | \$ -             |             |
|                   |  |                        |       | UTILITIES    | \$ -             |             |
|                   | <b>TOTAL FUNDING 2005 to 2030:</b> \$ 1,732,50 |                        |       |              | \$ -             |             |
| Total Funding Var | ries from early years                          | s and totals increase. | •     | OPERATIONS   | \$ 60,000        | 2005-2030   |

In coordination with the KYTC and other involved agencies, all tasks and products will be completed to comply with the requirements of the Clean Air Act. Please note that year-to-year may vary and are subject to change.

| <b>Lexington Traff</b> | kington Traffic Signal Upgrades                           |        |         |              |    | Coi     | ntinuing Program |
|------------------------|---|--------|---------|--------------|----|---------|------------------|
| MPO ID #               | KYTC ITEM #   | STATUS | ROUTE   | PHASE        |    | COST    | FISCAL YEAR      |
|                        |   |        |         |              |    |         |                  |
| 003.11                 | 227.00  | ANNUAL | PROGRAM | DESIGN       | \$ | -       |                  |
|                        |   |        |         | RIGHT OF WAY | \$ | -       |                  |
|                        |   |        |         | UTILITIES    | \$ | -       |                  |
|                        | <b>TOTAL FUNDING 2005 to 2030:</b> \$ 4,332,500           |        |         |              | \$ | -       |                  |
| Total Funding Var      | otal Funding Varies from early years and totals increase. |        |         |              | \$ | 160,000 | 2005-2030        |

Traffic signals will be replaced with better performing and more durable equipment to improve safety and efficiency. Please note that year-to-year may may vary and are subject to change.

| ITS/CMS Impro    | CMS Improvements                      |                       |         |              |    |         | ntinuing Program |
|------------------|---------------------------------------|-----------------------|---------|--------------|----|---------|------------------|
| MPO ID #         | KYTC ITEM #                           | STATUS                | ROUTE   | PHASE        |    | COST    | FISCAL YEAR      |
|                  |                                       |                       |         |              |    |         |                  |
| 004.11           | NA                                    | ANNUAL                | PROGRAM | DESIGN       | \$ | -       |                  |
|                  |                                       |                       |         | RIGHT OF WAY | \$ | -       |                  |
|                  |                                       |                       |         | UTILITIES    | \$ | -       |                  |
|                  | <b>TOTAL FUNDING 2005 to 2030:</b> \$ |                       |         | CONSTRUCTION | \$ | -       |                  |
| Total Funding Va | ries from early years                 | s and totals increase | •       | OPERATIONS   | \$ | 230,030 | 2005-2030        |

This program will use state-of-the-art technology and congestion management methods in fully-developed corridors and at intersections where increasing capacity (or widening) is not possible. These improvements enable these areas to operate as safely and efficiently as possible. Please note that year-to-year may vary and are subject to change.

# **SLX ROADWAY PROJECTS**

| Leestown Rd. (N | lew Circle Rd. to                             | Masterson Park)  |        |              |                 | <b>Road Widening</b> |
|-----------------|---|------------------|--------|--------------|-----------------|----------------------|
| MPO ID #        | KYTC ITEM #                                   | STATUS           | ROUTE  | PHASE        | COST            | FISCAL YEAR          |
|                 |   | Recommended FY   |        |              |                 |                      |
| 008.13          | 223.00  | 05FY 10 Six-Year | US 421 | DESIGN       | \$<br>632,947   | 1999                 |
|                 |   | Plan             |        | RIGHT OF WAY | \$<br>3,500,000 | 2004                 |
|                 |   |                  |        | UTILITIES    | \$<br>1,000,000 | 2004                 |
|                 | <b>TOTAL FUNDING 2005 to 2030:</b> \$ 5,000,0 |                  |        |              | \$<br>5,000,000 | 2006                 |
| Auto-Lanes:     | 4   | BIKE FAC.:       | Yes    | OPERATIONS   | \$<br>-         |                      |

The existing substandard two-lane rural road will be widened to four-lanes to relieve current and projected traffic congestion and provide safer travel conditions along this rapidly developing and commuter traffic corridor.

|             |             |                             |              |              |              | Road Wide  |
|-------------|-------------|-----------------------------|--------------|--------------|--------------|------------|
| MPO ID #    | KYTC ITEM # | STATUS                      | ROUTE        | PHASE        | COST         | FISCAL YEA |
| 008.13-A    | 223.02      | Recommended FY              | Year Plan    |              |              |            |
|             |             | 2005FY 2010 Six-            |              | DESIGN       |              |            |
|             |             | Year Plan                   |              | RIGHT OF WAY |              |            |
|             |             |                             |              | UTILITIES    |              |            |
|             |             | TOTAL FUNDING 2005 to 2030: | \$ 3,700,000 | CONSTRUCTION | \$ 3,700,000 | 2007       |
| Auto-Lanes: | 4           | BIKE FAC.:                  | Yes          | OPERATIONS   | \$ -         |            |

Additional Funding for "C" phase

| Liberty KY-1927 | perty KY-1927/Todds Rd Cadentown Bypass |                  |              |              |             |             |  |  |  |
|-----------------|---|------------------|--------------|--------------|-------------|-------------|--|--|--|
| MPO ID #        | KYTC ITEM #                             | STATUS           | ROUTE        | PHASE        | ANNUAL COST | FISCAL YEAR |  |  |  |
|                 |   | Recommended FY   |              |              |             |             |  |  |  |
| 042.83-A        | 590.01                                  | 2005FY 2010 Six- | KY 1927      | DESIGN       |             |             |  |  |  |
|                 |   | Year Plan        |              | RIGHT OF WAY |             |             |  |  |  |
|                 |   |                  |              | UTILITIES    |             |             |  |  |  |
|                 | TOTAL FUNDI                             | NG 2005 to 2030: | \$ 5,000,000 | CONSTRUCTION | \$5,000,000 | 2007        |  |  |  |
| Auto-Lanes:     |   | BIKE FAC.:       |              |              |             |             |  |  |  |

This project will construct a Liberty/Todds Road Bypass around historic Cadentown and connect to Man O'War Boulevard. This project will provide a more safe and efficient system for motorists and meet current and projected traffic demands in this area.

| erty/Todds F | Rd. (0.2 miles So |                  | Road Widening |              |                 |             |
|--------------|-------------------|------------------|---------------|--------------|-----------------|-------------|
| MPO ID #     | KYTC ITEM #       | STATUS           | ROUTE         | PHASE        | COST            | FISCAL YEAR |
|              |                   | Recommended FY   |               |              |                 |             |
| 010.13       | 225.00            | 2005FY 2010 Six- | KY-1927       | DESIGN       | \$<br>400,000   | 2004        |
|              |                   | Year Plan        |               | RIGHT OF WAY | \$<br>2,400,000 | 2004        |
|              |                   |                  |               | UTILITIES    | \$<br>1,400,000 | 2005        |
|              | CONSTRUCTION      | \$<br>4,000,000  | 2008          |              |                 |             |
| Auto-Lanes:  | 4                 | BIKE FAC.:       | Yes           | OPERATIONS   | \$<br>-         |             |

The existing substandard two-lane road will be widened to four lanes to relieve current and projected traffic congestion along this rapidly developing corridor. Signalization improvements will be considered during the project development process.

|                             |             |   |              |              |      | Road Widen  |
|-----------------------------|-------------|---|--------------|--------------|------|-------------|
| MPO ID #                    | KYTC ITEM # | STATUS  | ROUTE        | PHASE        | COST | FISCAL YEAR |
|                             |             | December ded DV                                 |              |              |      |             |
| 10.13                       | 225.01      | Recommended FY<br>2005FY 2010 Six-<br>Year Plan | KY-1927      | DESIGN       |      |             |
|                             |             | real rian                                       |              | RIGHT OF WAY |      |             |
|                             |             |   |              | UTILITIES    |      |             |
| TOTAL FUNDING 2005 to 2030: |             | \$ 4,500,000                                    | CONSTRUCTION | \$ 4,500,000 | 2009 |             |
| Auto-Lanes:                 | 4           | BIKE FAC.:                                      | Yes          | OPERATIONS   | \$ - |             |

| Clays Mill Road             | ays Mill Road (Harrodsburg Rd. to New Circle Road) |                  |              |              |    |           |             |  |
|-----------------------------|--|------------------|--------------|--------------|----|-----------|-------------|--|
| MPO ID #                    | KYTC ITEM #  | STATUS           | ROUTE        | PHASE        |    | COST      | FISCAL YEAR |  |
|                             |  | Recommended FY   |              |              |    |           |             |  |
| 011.13                      | 224.10   | 2005FY 2010 Six- | FS-8552      | DESIGN       | \$ | 460,000   | 2003        |  |
|                             |  | Year Plan        |              | RIGHT OF WAY | \$ | 225,000   | 2005        |  |
|                             |  |                  |              | UTILITIES    | \$ | 250,000   | 2005        |  |
| TOTAL FUNDING 2005 to 2030: |  |                  | \$ 5,475,000 | CONSTRUCTION | \$ | 5,000,000 | 2011        |  |
| Auto-Lanes:                 | 3 to 5   | BIKE FAC.:       | Yes          | OPERATIONS   | \$ | -         |             |  |

The existing substandard two-lane road will be widened from three to five lanes in intersection areas to relieve current and projected traffic congestion along this rapidly developing corridor. Signalization improvements will be considered during the project development process.

| Clays Mill Road | lays Mill Road (New Circle Road to Man o' War Blvd.) |                  |          |              |    |           |             |  |  |
|-----------------|--|------------------|----------|--------------|----|-----------|-------------|--|--|
| MPO ID #        | KYTC ITEM #  | STATUS           | ROUTE    | PHASE        |    | COST      | FISCAL YEAR |  |  |
|                 |  | Recommended FY   |          |              |    |           |             |  |  |
| 012.13          | 224.50   | 2005FY 2010 Six- | FS-8552  | DESIGN       | \$ | 345,000   | 2003        |  |  |
|                 |  | Year Plan        | <u> </u> | RIGHT OF WAY | \$ | 275,000   | 2005        |  |  |
|                 |  |                  |          | UTILITIES    | \$ | 330,000   | 2005        |  |  |
|                 | <b>TOTAL FUNDING 2005 to 2030:</b> \$ 7,605,000      |                  |          | CONSTRUCTION | \$ | 7,000,000 | 2010        |  |  |
| Auto-Lanes:     | 3 to 5   | BIKE FAC.:       | Yes      | OPERATIONS   | \$ | -         | _           |  |  |

The existing road will be widened to add turn lanes to meet current and projected traffic demands in this corridor.

| Fayette Mall Roa | ayette Mall Road (Man o' War Blvd. to West Reynolds Rd) |            |          |              |    |           |             |  |
|------------------|---|------------|----------|--------------|----|-----------|-------------|--|
| MPO ID #         | KYTC ITEM #   | STATUS     | ROUTE    | PHASE        |    | COST      | FISCAL YEAR |  |
|                  |   |            |          |              |    |           |             |  |
| 005.12           | 217.00  | 2030 PLAN  | NEW      | DESIGN       | \$ | 250,000   | 2012        |  |
|                  |   |            |          | RIGHT OF WAY | \$ | 5,000,000 | 2013        |  |
|                  |   |            |          | UTILITIES    | \$ | 250,000   | 2014        |  |
|                  | <b>TOTAL FUNDING 2005 to 2030:</b> \$ 7,500,000         |            |          |              | \$ | 2,000,000 | 2015        |  |
| Auto-Lanes:      | 3-4   | BIKE FAC.: | POSSIBLE | OPERATIONS   | \$ | -         |             |  |

This project will build a new 3-lane collector road from Reynolds Road to Man o'War Boulevard to improve access and relieve Nicholasville Road (US-27).

| Starshoot Parkw | vay (Connection             | to Liberty Rd.) |          |              | New Roadway  |             |
|-----------------|-----------------------------|-----------------|----------|--------------|--------------|-------------|
| MPO ID #        | KYTC ITEM #                 | STATUS          | ROUTE    | PHASE        | COST         | FISCAL YEAR |
|                 |                             |                 |          |              |              |             |
| 006.12          | NA                          | 2030 PLAN       | NEW      | DESIGN       | \$ 150,000   | 2012        |
|                 |                             |                 |          | RIGHT OF WAY | \$ -         | 2013        |
|                 |                             |                 |          | UTILITIES    | \$ 50,000    | 2014        |
|                 | TOTAL FUNDING 2005 to 2030: |                 |          | CONSTRUCTION | \$ 1,800,000 | 2015        |
| Auto-Lanes:     | 4-Jan                       | BIKE FAC.:      | POSSIBLE | OPERATIONS   | \$ -         |             |

This project will build a new 4 lane road and bridge extending Starshoot Parkway to connect with Liberty Road.

| Man o' War Boul | evard (I-75 to R                                | lichmond Road) |         |              |    |           | Road Widening |
|-----------------|---|----------------|---------|--------------|----|-----------|---------------|
| MPO ID #        | KYTC ITEM #                                     | STATUS         | ROUTE   | PHASE        |    | COST      | FISCAL YEAR   |
|                 |   |                |         |              |    |           |               |
| 016.13          | NA  | 2030 PLAN      | FS 8550 | DESIGN       | \$ | 750,000   | 2012          |
|                 |   |                |         | RIGHT OF WAY | \$ | 5,500,000 | 2013          |
|                 |   |                |         | UTILITIES    | \$ | 500,000   | 2014          |
|                 | <b>TOTAL FUNDING 2005 to 2030:</b> \$13,250,000 |                |         |              |    | 6,500,000 | 2015          |
| Auto-Lanes:     | 6   | BIKE FAC.:     | Yes     | OPERATIONS   | \$ | -         |               |

The existing road will be widened to six lanes to meet current and projected traffic demands in this rapidly developing, interstate linked corridor.

| llumni Drive (Edgewater Drive to Man o' War Boulevard) |              |                 |       |              |                 | Road Widening |
|--|--------------|-----------------|-------|--------------|-----------------|---------------|
| MPO ID #   | KYTC ITEM #  | STATUS          | ROUTE | PHASE        | COST            | FISCAL YEAR   |
|  |              |                 |       |              |                 |               |
| 017.13   | NA           | 2030 PLAN       |       | DESIGN       | \$<br>400,000   | 2012          |
|  |              |                 |       | RIGHT OF WAY | \$<br>1,000,000 | 2013          |
|  |              |                 |       | UTILITIES    | \$<br>250,000   | 2014          |
|  | CONSTRUCTION | \$<br>3,000,000 | 2015  |              |                 |               |
| Auto-Lanes:  | 6            | BIKE FAC.:      | Yes   | OPERATIONS   | \$<br>-         |               |

The existing four lane road will be widened to six lanes along with other improvements to meet current and projected travel demands in this important corridor.

| Man o' War Blvd | . (Richmond Rd.                                 |            | Road Widening |              |                 |             |
|-----------------|---|------------|---------------|--------------|-----------------|-------------|
| MPO ID #        | KYTC ITEM #                                     | STATUS     | ROUTE         | PHASE        | COST            | FISCAL YEAR |
|                 |   |            |               |              |                 |             |
| 021.13          | NA  | 2030 PLAN  | FS 8550       | DESIGN       | \$<br>400,000   | 2013        |
|                 |   |            |               | RIGHT OF WAY | \$<br>4,600,000 | 2014        |
|                 |   |            |               | UTILITIES    | \$<br>500,000   | 2015        |
|                 | <b>TOTAL FUNDING 2005 to 2030:</b> \$12,500,000 |            |               |              | \$<br>7,000,000 | 2016        |
| Auto-Lanes:     | 6   | BIKE FAC.: | Yes           | OPERATIONS   | \$<br>-         |             |

The existing four-lane road will be widened to six lanes to meet current and projected traffic demands in this area.

| Liberty Road (No | ew Circle Road t                                | o Church of God) |         |              |    |           | Road Widening |
|------------------|---|------------------|---------|--------------|----|-----------|---------------|
| MPO ID #         | KYTC ITEM #                                     | STATUS           | ROUTE   | PHASE        |    | COST      | FISCAL YEAR   |
|                  |   |                  |         |              |    |           |               |
| 013.13           | NA  | 2030 PLAN        | KY 1927 | DESIGN       | \$ | 500,000   | 2015          |
|                  |   |                  |         | RIGHT OF WAY | \$ | 1,000,000 | 2017          |
|                  |   |                  |         | UTILITIES    | \$ | 500,000   | 2017          |
|                  | <b>TOTAL FUNDING 2005 to 2030:</b> \$ 7,500,000 |                  |         |              |    | 5,500,000 | 2019          |
| Auto-Lanes:      | 3   | BIKE FAC.:       | Yes     | OPERATIONS   | \$ | -         |               |

The existing substandard road will be widened to three lanes to meet current and projected traffic demands in this rapidly developing corridor.

| Loudon Avenue | Loudon Avenue (Russell Cave Road to Oakhill Drive) |            |       |              |    |           | ad Improvements |
|---------------|--|------------|-------|--------------|----|-----------|-----------------|
| MPO ID #      | KYTC ITEM #  | STATUS     | ROUTE | PHASE        |    | COST      | FISCAL YEAR     |
|               |  |            |       |              |    |           |                 |
| 014.13        | NA   | 2030 PLAN  |       | DESIGN       | \$ | 500,000   | 2017            |
|               |  |            |       | RIGHT OF WAY | \$ | 400,000   | 2018            |
|               |  |            |       | UTILITIES    | \$ | 200,000   | 2019            |
|               | <b>TOTAL FUNDING 2005 to 2030:</b> \$ 5,600,000    |            |       |              |    | 4,500,000 | 2020            |
| Auto-Lanes:   |  | BIKE FAC.: | Yes   | OPERATIONS   | \$ | -         |                 |

The existing substandard road will be improved and turn lanes added where possible to meet current and projected traffic demands in this corridor.

| Russell Cave Ro | ad - Park Place | to North Broadway | /      |              |                 |                           |
|-----------------|-----------------|-------------------|--------|--------------|-----------------|---------------------------|
| MPO ID #        | KYTC ITEM #     | STATUS            | ROUTE  | PHASE        | COST            | Road Widening FISCAL YEAR |
| PIFO ID #       | RIICTIEM#       | SIAIUS            | ROUTE  | FIIASE       | COST            | FISCAL TEAR               |
| 020.13          | NA              | 2030 PLAN         | KY 353 | DESIGN       | \$<br>420,000   | 2017                      |
|                 |                 |                   |        | RIGHT OF WAY | \$<br>1,594,000 | 2018                      |
|                 |                 |                   |        | UTILITIES    | \$<br>200,000   | 2019                      |
|                 | CONSTRUCTION    | \$<br>2,000,000   | 2020   |              |                 |                           |
| Auto-Lanes:     | 4               | BIKE FAC.:        | Yes    | OPERATIONS   | \$<br>-         |                           |

The existing two lane section will be brought up to standards (no longer widening), including adding bicycle and pedestrian facilities.

| Parkers Mill Rd. | (Versailles Rd. t                               | o Man o' War Blvd | .)            |              |                 |             |
|------------------|---|-------------------|---------------|--------------|-----------------|-------------|
|                  |   |                   | Road Widening |              |                 |             |
| MPO ID #         | KYTC ITEM #                                     | STATUS            | ROUTE         | PHASE        | COST            | FISCAL YEAR |
|                  |   |                   |               |              |                 |             |
| 022.13           | NA  | 2030 PLAN         | KY-1968       | DESIGN       | \$<br>556,000   | 2017        |
|                  |   |                   |               | RIGHT OF WAY | \$<br>400,000   | 2018        |
|                  |   |                   |               | UTILITIES    | \$<br>400,000   | 2019        |
|                  | <b>TOTAL FUNDING 2005 to 2030:</b> \$ 2,856,000 |                   |               |              | \$<br>1,500,000 | 2020        |
| Auto-Lanes:      | 3   | BIKE FAC.:        | Yes           | OPERATIONS   | \$<br>-         |             |

The existing substandard road will be brought up to standards (no longer widening).

| Todds Rd. (Code | ll Drive to Man o                  | o' War Boulevard) |         |              |                 | Road Widening |
|-----------------|------------------------------------|-------------------|---------|--------------|-----------------|---------------|
| MPO ID #        | KYTC ITEM #                        | STATUS            | ROUTE   | PHASE        | COST            | FISCAL YEAR   |
|                 |                                    |                   |         |              |                 |               |
| 023.13          | NA                                 | 2030 PLAN         | KY-1927 | DESIGN       | \$<br>450,000   | 2017          |
|                 |                                    |                   |         | RIGHT OF WAY | \$<br>750,000   | 2018          |
|                 |                                    |                   |         | UTILITIES    | \$<br>815,000   | 2019          |
|                 | <b>TOTAL FUNDING 2005 to 2030:</b> |                   |         | CONSTRUCTION | \$<br>4,800,000 | 2020          |
| Auto-Lanes:     | 3                                  | BIKE FAC.:        | Yes     | OPERATIONS   | \$<br>-         |               |

The existing substandard road will be brought up to standards (no longer widening).

| Alumni Dr. (Nich                                | lumni Dr. (Nicholasville Rd. to Chinoe Rd.)  Road Widenin |            |       |              |    |           |             |  |  |  |
|---|---|------------|-------|--------------|----|-----------|-------------|--|--|--|
| MPO ID #  | KYTC ITEM #   | STATUS     | ROUTE | PHASE        |    | COST      | FISCAL YEAR |  |  |  |
|   |   |            |       |              |    |           |             |  |  |  |
| 025.13  | NA  | 2030 PLAN  |       | DESIGN       | \$ | 1,240,000 | 2017        |  |  |  |
|   |   |            |       | RIGHT OF WAY | \$ | 3,965,000 | 2018        |  |  |  |
|   |   |            |       | UTILITIES    | \$ | -         | 2019        |  |  |  |
| <b>TOTAL FUNDING 2005 to 2030:</b> \$12,730,000 |   |            |       | CONSTRUCTION | \$ | 7,525,000 | 2020        |  |  |  |
| Auto-Lanes:                                     | 4   | BIKE FAC.: | Yes   | OPERATIONS   | \$ | -         | _           |  |  |  |

The existing two lane road will be widened to four lanes to meet current and projected traffic demands in this corridor.

| Brannon Road ( | US 68 to US 27) |                  |              |              |                 | Road Widening |
|----------------|-----------------|------------------|--------------|--------------|-----------------|---------------|
| MPO ID #       | KYTC ITEM #     | STATUS           | ROUTE        | PHASE        | COST            | FISCAL YEAR   |
|                |                 |                  |              |              |                 |               |
| 031.12         | NA              | 2030 PLAN        | FS 8550      | DESIGN       | \$<br>650,000   | 2027          |
|                |                 |                  |              | RIGHT OF WAY | \$<br>3,000,000 | 2028          |
|                |                 |                  |              | UTILITIES    | \$<br>1,250,000 | 2029          |
|                | TOTAL FUNDI     | NG 2005 to 2030: | \$12,930,435 | CONSTRUCTION | \$<br>8,030,435 | 2030          |
| Auto-Lanes:    | 4               | BIKE FAC.:       | Yes          | OPERATIONS   | \$<br>-         |               |

The existing two-lane roadway would be widened to accommodate current and projected traffic demands in this area.

| Man o' War Blvd | Man o' War Blvd. (Armstrong Mill Rd. to Tates Creek Rd.) |            |         |              |    |           |             |  |  |  |
|-----------------|--|------------|---------|--------------|----|-----------|-------------|--|--|--|
| MPO ID #        | KYTC ITEM #  | STATUS     | ROUTE   | PHASE        |    | COST      | FISCAL YEAR |  |  |  |
|                 |  |            |         |              |    |           |             |  |  |  |
| 024.13          | NA   | 2030 PLAN  | FS 8550 | DESIGN       | \$ | 550,000   | 2027        |  |  |  |
|                 |  |            |         | RIGHT OF WAY | \$ | 300,000   | 2028        |  |  |  |
|                 |  |            |         | UTILITIES    | \$ | 250,000   | 2029        |  |  |  |
| _               | <b>TOTAL FUNDING 2005 to 2030:</b> \$ 6,100,000          |            |         |              |    | 5,000,000 | 2030        |  |  |  |
| Auto-Lanes:     | 6  | BIKE FAC.: | Yes     | OPERATIONS   | \$ | -         |             |  |  |  |

The existing four lane road will be widened to six lanes to meet current and projected traffic demands in this area.

| Man o' War Blvd                                 | . (Tates Creek R |            | Road Widening |              |                 |             |
|---|------------------|------------|---------------|--------------|-----------------|-------------|
| MPO ID #  | KYTC ITEM #      | STATUS     | ROUTE         | PHASE        | COST            | FISCAL YEAR |
|   |                  |            |               |              |                 |             |
| 026.13  | NA               | 2030 PLAN  | FS 8550       | DESIGN       | \$<br>500,000   | 2027        |
|   |                  |            |               | RIGHT OF WAY | \$<br>3,500,000 | 2028        |
|   |                  |            |               | UTILITIES    | \$<br>300,000   | 2029        |
| <b>TOTAL FUNDING 2005 to 2030:</b> \$10,300,000 |                  |            |               | CONSTRUCTION | \$<br>6,000,000 | 2030        |
| Auto-Lanes:                                     | 6                | BIKE FAC.: | Yes           | OPERATIONS   | \$<br>-         |             |

The existing four lane road will be widened to six lanes to meet current and projected traffic demands in this area.

| Man o' War Bou | levard (I-75 to V | Vinchester Rd.)  |              |              |                 | Road Widening |
|----------------|-------------------|------------------|--------------|--------------|-----------------|---------------|
| MPO ID #       | KYTC ITEM #       | STATUS           | ROUTE        | PHASE        | COST            | FISCAL YEAR   |
|                |                   |                  |              |              |                 |               |
| 028.13         | NA                | 2030 PLAN        | FS 8550      | DESIGN       | \$<br>500,000   | 2027          |
|                |                   |                  |              | RIGHT OF WAY | \$<br>3,000,000 | 2028          |
|                |                   |                  |              | UTILITIES    | \$<br>500,000   | 2029          |
|                | TOTAL FUNDI       | NG 2005 to 2030: | \$10,000,000 | CONSTRUCTION | \$<br>6,000,000 | 2030          |
| Auto-Lanes:    | 6                 | BIKE FAC.:       | Yes          | OPERATIONS   | \$<br>-         |               |

The existing two lane section will be widened to six lanes to meet projected traffic growth demands from anticipated development in this area.

| SUMMARY   |               |
|---|---------------|
| Total anticipated SLX allocation from FY 2005 to 2030   | \$171,135,435 |
| Total anticipated SLX expenditures from FY 2005 to 2030 | \$171,135,435 |
| Amount over/under budget                                | <b>\$</b> -   |

# PLAN FOR IMPLEMENTING NON-SLX PROJECTS:

Figure 5.9: PLAN FOR IMPLEMENTING NON-SLX PROJECTS

# FEDERAL AID PROGRAMS AND PROJECTS

# **IM--FEDERAL INTERSTATE MAINTENANCE PROJECTS**

| MPO ID #    | KYTC ITEM # | STATUS                                      | ROUTE     | PHASE        | ANNUAL<br>COST | FISCAL YEA |
|-------------|-------------|---|-----------|--------------|----------------|------------|
| 075.20A     | 2015.00     | Recommended FY 2005FY 2010<br>Six-Year Plan | I-75      |              |                |            |
|             |             | FUNDING SOURCE:                             | IM        |              |                |            |
|             |             | TOTAL FUNDING 2005 to 2030:                 | \$650,000 | CONSTRUCTION | \$650,000      | 2008       |
| Auto-Lanes: |             | BIKE FAC.:                                  |           |              |                |            |

| IMFederal I    | Federal Interstate Maintenance |   |             |              |                | Pavement Rehabilitation |  |
|----------------|--------------------------------|---|-------------|--------------|----------------|-------------------------|--|
| MPO ID #       | KYTC ITEM #                    | STATUS                                      | ROUTE       | PHASE        | ANNUAL<br>COST | FISCAL YEAR             |  |
| 075.20B        | 2016.00                        | Recommended FY 2005FY 2010<br>Six-Year Plan | I-75        |              |                |                         |  |
|                |                                | FUNDING SOURCE:                             | IM          |              |                |                         |  |
|                |                                | TOTAL FUNDING 2005 to 2030:                 | \$4,500,000 | CONSTRUCTION | \$4,500,000    | 2008                    |  |
| Auto-Lanes     | :                              | BIKE FAC.:                                  |             |              |                |                         |  |
| The IM project | will repair and                | grind on I-75 from MP 111.82 to MP          | 117.80.     |              |                |                         |  |

| IMFederal I    | nterstate Ma    |   | <b>Pavement Rehabilitation</b> |              |                |             |
|----------------|-----------------|---|--------------------------------|--------------|----------------|-------------|
| MPO ID #       | KYTC ITEM #     | STATUS                                      | ROUTE                          | PHASE        | ANNUAL<br>COST | FISCAL YEAR |
| 064.20         | 2017.00         | Recommended FY 2005FY 2010<br>Six-Year Plan | I-64                           |              |                |             |
|                |                 | FUNDING SOURCE:                             | IM                             |              |                |             |
|                | TO              | <b>TAL FUNDING 2005 to 2030:</b>            | \$600,000                      | CONSTRUCTION | \$600,000      | 2008        |
| Auto-Lanes:    | i<br>!          | BIKE FAC.:                                  |                                |              |                |             |
| The IM project | will repair and | grind on I-64 from MP 81.037 to MF          | 82.32.                         |              |                |             |

# **NH--FEDERAL NATIONAL HIGHWAY SYSTEM PROGRAM**

| NHFederal N      | National High  | Minor Widening                              |             |              |              |                |
|------------------|----------------|---|-------------|--------------|--------------|----------------|
| MPO ID #         | KYTC ITEM #    | STATUS                                      | ROUTE       | PHASE        | ANNUAL COST  | FISCAL<br>YEAR |
| 041.43           | 252.00         | Recommended FY 2005FY 2010<br>Six-Year Plan | I-64        | DESIGN       | \$1,000,000  | 2007           |
|                  |                | <b>FUNDING SOURCE:</b>                      | NH          | RIGHT OF WAY | \$2,500,000  | 2008           |
|                  | TO             | <b>TAL FUNDING 2005 to 2030:</b>            | \$1,000,000 | UTILITIES    | \$2,000,000  | 2009           |
| Auto-Lanes:      | i<br>I         | BIKE FAC.:                                  |             | CONSTRUCTION | \$10,000,000 | 2010           |
| The project will | provide a six- | lane minor widening from KY 4 to I-7        | 75.         |              |              |                |

# **HBP--HIGHWAY BRIDGE PROGRAM**

|             |             |  |             |              |                | inor Widening |
|-------------|-------------|--|-------------|--------------|----------------|---------------|
| MPO ID #    | KYTC ITEM # | STATUS   | ROUTE       | PHASE        | ANNUAL<br>COST | FISCAL YEAR   |
|             |             |  |             |              |                |               |
| 065.72      | 1111.00     | Recommended FY 2005FY 2010<br>Six-Year Plan & FY 2005FY 2008 | KY 922      |              |                |               |
| 003.72      | 1111.00     | TIP  |             | DESIGN       | \$125,000      | 2004          |
|             |             |  |             | RIGHT OF WAY | \$250,000      | 2006          |
|             |             | FUNDING SOURCE:  | BRX         | UTILITIES    | \$100,000      | 2006          |
|             |             | TOTAL FUNDING 2005 to 2030:                                  | \$1,050,000 | CONSTRUCTION | \$700,000      | 2007          |
| Auto-Lanes: |             | BIKE FAC.:   | Recommended | OPERATIONS   |                |               |

The bridge replacement project (BRX) will provide a safer crossing for persons traveling along one of Fayette County's scenic rural roadways.

# STP--FEDERAL SURFACE TRANSPORTATION PROGRAM PROJECTS

| tation Boul | evard - Phase | II (Southern RR to Leestown Ro       | d.)         |              | New Roadway    |             |
|-------------|---------------|--------------------------------------|-------------|--------------|----------------|-------------|
| MPO ID #    | KYTC ITEM #   | STATUS                               | ROUTE       | PHASE        | ANNUAL<br>COST | FISCAL YEAR |
|             |               | Recommended FY 2005FY 2010           |             |              |                |             |
| 046.22      | 226.01        | 26.01 Six-Year Plan & FY 2005FY 2008 | US 68       | DESIGN       | \$500,000      | 2004        |
|             |               | TIP                                  |             | RIGHT OF WAY | \$8,180,000    | 2004        |
|             |               | FUNDING SOURCE:                      | STP         | UTILITIES    | \$1,500,000    | 2006        |
|             |               | TOTAL FUNDING 2005 to 2030:          | \$7,500,000 | CONSTRUCTION | \$6,000,000    | 2008        |
| Auto-Lanes  | :             | BIKE FAC.: I                         | Recommended | OPERATIONS   |                |             |

This project will continue Citation Boulevard Phase I from the Southern Railroad to just South of Leestown Road (US-421) to meet projected traffic demands in this rapidly developing area.

| Newtown Pik | e Extension |                                       |              |              |                | New Roadway |
|-------------|-------------|---------------------------------------|--------------|--------------|----------------|-------------|
| MPO ID #    | KYTC ITEM # | STATUS                                | ROUTE        | PHASE        | ANNUAL<br>COST | FISCAL YEAR |
|             |             | Recommended FY 2005FY 2010            |              |              |                |             |
| 043.22      | 593.01      | Six-Year Plan & FY 2005FY 2008<br>TIP | NA           | DESIGN       | \$ -           |             |
|             |             |                                       |              | RIGHT OF WAY | \$6,750,000    | 2007        |
|             |             | FUNDING SOURCE:                       | STP          | UTILITIES    | \$6,000,000    | 2008        |
|             |             | TOTAL FUNDING 2005 to 2030:           | \$28,850,000 | CONSTRUCTION | \$16,100,000   | 2009        |
| Auto-Lanes  | :           | BIKE FAC.:                            | Recommended  | OPERATIONS   |                |             |

This project will provide a new extension of Newtown Pike around the west side of Downtown Lexington. The project will relieve unnecessary traffic congestion in the downtown area by providing through trips (with no destination in the downtown area) a route to bypass.

| Viley Road Ex | Tiley Road Extension- Phase II (Southern RR to Leestown Rd.) |   |              |                        |                |             |  |
|---------------|--|---|--------------|------------------------|----------------|-------------|--|
| MPO ID #      | KYTC ITEM #  | STATUS                                      | ROUTE        | PHASE                  | ANNUAL<br>COST | FISCAL YEAR |  |
| 046.23        | 226.02   | Recommended FY 2005FY 2010<br>Six-Year Plan |              | DESIGN<br>RIGHT OF WAY |                |             |  |
|               |  | FUNDING SOURCE:                             | STP          | UTILITIES              |                |             |  |
|               | TOTAL FUND   | DING 2005 to 2030:                          | \$10,000,000 | CONSTRUCTION           | \$10,000,000   | 2009        |  |
| Auto-Lanes:   | :  | BIKE FAC.:                                  | Recommended  | OPERATIONS             |                |             |  |

This project will continue Citation Boulevard Phase I from Southern Railroad to just South of Leestown Road (US-421) to meet projected traffic demands in this rapidly developing area.

| East Nicholas | sville Bypass ( |   | New Roadway  |              |                |             |
|---------------|-----------------|---|--------------|--------------|----------------|-------------|
| MPO ID #      | KYTC ITEM #     | STATUS  | ROUTE        | PHASE        | ANNUAL<br>COST | FISCAL YEAR |
| 047.22        | 87.10           | 2030 PLAN & Recommended FY<br>2005FY 2010 Six-Year Plan | US 27        | DESIGN       | \$400,000      |             |
|               |                 | 2003-11 2010 SIX-1eal Flair                             |              | RIGHT OF WAY | \$10,000,000   | 2010        |
|               |                 | FUNDING SOURCE:   | STP          | UTILITIES    | \$726,000      | 2010        |
|               |                 | TOTAL FUNDING 2005 to 2030:                             | \$22,726,000 | CONSTRUCTION | \$12,000,000   | 2015        |
| Auto-Lanes    | :               | BIKE FAC.:  | Recommended  | OPERATIONS   |                |             |

This project will construct a new bypass route around the east side of the City of Nicholasville to meet projected traffic demands in this rapidly developing area. The project is planned in the 2030 Plan and the Recommended KYTC Six-Year Plan (FY 05--FY 10) programs right-of-way and utilities phase for FY 2010.

| Georgetown F | Rd. US-25 (S | purr Road to Etter Ln.)                     |              | Major Road   |                | oad Widening |
|--------------|--------------|---|--------------|--------------|----------------|--------------|
| MPO ID #     | KYTC ITEM #  | STATUS                                      | ROUTE        | PHASE        | ANNUAL<br>COST | FISCAL YEAR  |
|              |              | D   |              |              |                |              |
| 044.23       | 122.00       | Recommended FY 2005FY 2010<br>Six-Year Plan | KY-25        | DESIGN       | \$1,000,000    |              |
|              |              |   |              | RIGHT OF WAY | \$16,500,000   | 2010         |
|              |              | FUNDING SOURCE:                             | STP          | UTILITIES    | \$5,200,000    | 2011         |
|              |              | TOTAL FUNDING 2005 to 2030:                 | \$39,200,000 | CONSTRUCTION | \$16,500,000   | 2015         |
| Auto-Lanes:  | 1            | BIKE FAC.:                                  |              | OPERATIONS   |                |              |

The existing two-lane road will be widened to four lanes to meet current and projected traffic demands in this corridor. LEXINGTON-GEORGETOWN; GEORGETOWN ROAD FROM SPURR ROAD (KY-1977) TO ETTER LANE.

# SP--STATE CONTINUING PROGRAMS

| Operation of | Valley View F | Ferry at KY River           | Continuing Progra |              |                |             |
|--------------|---------------|-----------------------------|-------------------|--------------|----------------|-------------|
| MPO ID #     | KYTC ITEM #   | STATUS                      | ROUTE             | PHASE        | ANNUAL<br>COST | FISCAL YEAR |
|              |               |                             |                   |              |                |             |
| 035.31       | Varies        | FY 2005FY 2008 TIP          | NA                | DESIGN       |                |             |
|              |               |                             |                   | RIGHT OF WAY |                |             |
|              |               | FUNDING SOURCE:             | SP                | UTILITIES    |                |             |
|              |               | TOTAL FUNDING 2005 to 2030: | \$3,250,000       | CONSTRUCTION |                |             |
|              |               |                             |                   | OPERATIONS   | \$125,000      | 2005-2030   |

These State Project (SP) funds are dedicated to the continued operation of the Historic Valley View Ferry on the Kentucky River. The ferry is jointly operated by Fayette, Jessamine, and Madison Counties, and it is the oldest continuing business in Kentucky having been granted a franchise by the Virginia legislature in 1785.

# **SP--State Projects**

| Harrodsburg Rd. US-68 ( New Circle Rd. to Man o'War Boulevard) |             |   |             |              |                | Road Widening |  |
|--|-------------|---|-------------|--------------|----------------|---------------|--|
| MPO ID #   | KYTC ITEM # | STATUS  | ROUTE       | PHASE        | ANNUAL<br>COST | FISCAL YEAR   |  |
| 036.33   | 144.00      | Recommended FY 2005FY 2010<br>Six-Year Plan & FY 2005FY 2008<br>TIP | US 68       |              |                |               |  |
|  |             |   |             | DESIGN       | \$400,000      | 2005          |  |
|  |             |   |             | RIGHT OF WAY | \$5,500,000    | 2010          |  |
|  |             | FUNDING SOURCE:   | SP          | UTILITIES    | \$50,000       | 2013          |  |
|  |             | TOTAL FUNDING 2005 to 2030:   | \$9,350,000 | CONSTRUCTION | \$3,400,000    | 2015          |  |
| Auto-Lanes:  | •           | BIKE FAC.:  |             | OPERATIONS   |                |               |  |

Located in Fayette County, the existing four-lane section will be widened to six-lanes to meet current and projected traffic demands along this corridor.

| Harrodsburg | Rd. US-68 (K     | Y 29 to Brannon Rd.)   | Road Widenir |              |                |             |
|-------------|------------------|--|--------------|--------------|----------------|-------------|
| MPO ID #    | KYTC ITEM #      | STATUS   | ROUTE        | PHASE        | ANNUAL<br>COST | FISCAL YEAR |
|             | 318.01           | Recommended FY 2005FY 2010<br>Six-Year Plan & FY 2005FY 2010 |              |              |                |             |
| 037.33      | Parent<br>Number |  |              | DESIGN       | \$600,000      |             |
|             | 318.00           |  |              | RIGHT OF WAY | \$2,500,000    | 2005        |
|             |                  | FUNDING SOURCE:  | SP           | UTILITIES    | \$1,000,000    | 2005        |
|             |                  | TOTAL FUNDING 2005 to 2030:                                  | \$21,682,000 | CONSTRUCTION | \$18,182,000   | 2006        |
| Auto-Lanes: |                  | BIKE FAC.:   | Recommended  | OPERATIONS   |                |             |

Located in Jessamine County, the existing two-lane road will be widened to four-lanes to meet current and projected traffic demands and provide better safety for motorist along this corridor.

# **HPP -- HIGH PRIORITY PROJECTS**

| Liberty KY-19 | iberty KY-1927/Todds Rd Cadentown Bypass |   |             |              |                |             |  |
|---------------|--|---|-------------|--------------|----------------|-------------|--|
| MPO ID #      | KYTC ITEM #                              | STATUS  | ROUTE       | PHASE        | ANNUAL<br>COST | FISCAL YEAR |  |
| 042.83        | 590.00                                   | Recommended FY 2005FY 2010<br>Six-Year Plan & FY 2005FY 2008<br>TIP |             |              |                |             |  |
|               |  |   |             | DESIGN       | \$800,000      |             |  |
|               |  |   |             | RIGHT OF WAY | \$580,000      |             |  |
|               |  | FUNDING SOURCE:   | HPP         | UTILITIES    | \$64,000       | 2004        |  |
|               |  | TOTAL FUNDING 2005 to 2030:   | \$1,325,000 | CONSTRUCTION | \$1,325,000    | 2005        |  |
| Auto-Lanes:   |  | BIKE FAC.:  | Recommended | OPERATIONS   | · ·            |             |  |

This project will construct a Liberty/Todds Road Bypass around historic Cadentown and connect to Man O'War Boulevard. This project will provide a more safe and efficient system for motorists and meet current and projected traffic demands in this area.

# **HES--FEDERAL HAZARD ELIMINATION SAFETY PROJECT**

| ntersection o | of KY 1681 ar | nd Alexandria Drive at WUB  |                    |                        |                | Hazard<br>Elimination<br>Safety<br>Project |
|---------------|---------------|-----------------------------|--------------------|------------------------|----------------|--|
| MPO ID#       | KYTC ITEM #   | STATUS                      | ROUTE              | PHASE                  | ANNUAL<br>COST | FISCAL YEAR                                |
|               |               |                             |                    |                        |                |  |
|               | 912.00        | Recommended FY 2005FY 2010  | KY 1681            |                        |                |  |
|               | 712.00        | Six-Year Plan               |                    | DESIGN                 |                | 2003                                       |
|               |               |                             |                    | RIGHT OF WAY           | \$ 325,000     | 2007                                       |
|               |               | FUNDING SOURCE:             | HES                | UTILITIES              | \$ 80,000      | 2007                                       |
|               |               | TOTAL FUNDING 2005 to 2030: | \$1,395,774        | CONSTRUCTION           | \$990,774      | 2008                                       |
| Auto-Lanes:   |               | BIKE FAC.:                  | Recommended        | OPERATIONS             |                |  |
| Auto-Lanes:   | •             | TOTAL FUNDING 2005 to 2030: | HES<br>\$1,395,774 | UTILITIES CONSTRUCTION | \$ 80,000      | :  |

The project will construct badly-needed left turn lanes and improve sight distance.

# STP - PROJECTS WITHOUT A DEDICATED FUNDING SOURCE

| Nicholasville I | icholasville Rd. US-27 (Southland Drive to New Circle Rd.) |                             |              |              |                |             |
|-----------------|--|-----------------------------|--------------|--------------|----------------|-------------|
| MPO ID #        | KYTC ITEM #  | STATUS                      | ROUTE        | PHASE        | ANNUAL<br>COST | FISCAL YEAR |
|                 |  |                             |              |              |                |             |
| 048.03          | NA   | 2030 PLAN                   | US 27        | DESIGN       | \$200,000      | 2012        |
|                 |  |                             |              | RIGHT OF WAY | \$2,750,000    | 2013        |
|                 |  | FUNDING SOURCE:             | STP          | UTILITIES    | \$75,500       | 2014        |
|                 |  | TOTAL FUNDING 2005 to 2030: | \$ 4,925,500 | CONSTRUCTION | \$1,900,000    | 2015        |
| Auto-Lanes:     | 9  | BIKE FAC.:                  | YES          | OPERATIONS   |                |             |

The existing seven-lane section will be widened to nine lanes to meet current and projected traffic demands through this highly commercial, north/south corridor. Please note special consideration of pedestrian signals to accommodate longer crossing times (i.e. refuge area, more visible crosswalks).

| Nicholasville I | icholasville Rd. US-27 (New Circle Rd. to Man o'War Boulevard) |                             |              |              |                |             |  |
|-----------------|--|-----------------------------|--------------|--------------|----------------|-------------|--|
| MPO ID #        | KYTC ITEM #  | STATUS                      | ROUTE        | PHASE        | ANNUAL<br>COST | FISCAL YEAR |  |
|                 |  |                             |              |              |                |             |  |
| 049.03          | NA   | 2030 PLAN                   | US 27        | DESIGN       | \$300,000      | 2012        |  |
|                 |  |                             |              | RIGHT OF WAY | \$6,000,000    | 2013        |  |
|                 |  | FUNDING SOURCE:             | STP          | UTILITIES    | \$ 75,000      | 2014        |  |
|                 |  | TOTAL FUNDING 2005 to 2030: | \$ 9,075,000 | CONSTRUCTION | \$ 2,700,000   | 2015        |  |
| Auto-Lanes:     | 9  | BIKE FAC.:                  | YES          | OPERATIONS   |                |             |  |

The existing seven-lane section will be widened to nine lanes to meet current and projected traffic demands through this highly commercial, north/south corridor. Please note special consideration of pedestrian signals to accommodate longer crossing times (i.e. refuge area, more visible crosswalks).

| Nicholasville I | Rd. US-27 (M | lan o'War Boulevard to Nicholas |              | Road Widening |                |             |
|-----------------|--------------|---------------------------------|--------------|---------------|----------------|-------------|
| MPO ID #        | KYTC ITEM #  | STATUS                          | ROUTE        | PHASE         | ANNUAL<br>COST | FISCAL YEAR |
|                 |              |                                 |              |               |                |             |
| 050.03          | NA           | 2030 PLAN                       | US 27        | DESIGN        | \$250,000      | 2012        |
|                 |              |                                 |              | RIGHT OF WAY  | \$6,000,000    | 2013        |
|                 |              | FUNDING SOURCE:                 | STP          | UTILITIES     | \$ 75,000      | 2014        |
|                 |              | TOTAL FUNDING 2005 to 2030:     | \$12,545,000 | CONSTRUCTION  | \$6,220,000    | 2015        |
| Auto-Lanes:     | 7            | BIKE FAC.:                      | YES          | OPERATIONS    |                |             |

The existing four-lane section will be widened to six-lanes to meet current and projected traffic demands in this important corridor. Please note special consideration of pedestrian signals to accommodate longer crossing times (i.e. refuge area, more visible crosswalks).

| Winchester R | d. US-60 (Mi |                             | Road Widening |              |                |             |
|--------------|--------------|-----------------------------|---------------|--------------|----------------|-------------|
| MPO ID #     | KYTC ITEM #  | STATUS                      | ROUTE         | PHASE        | ANNUAL<br>COST | FISCAL YEAR |
|              |              |                             |               |              |                |             |
| 051.03       | NA           | 2030 PLAN                   | US-60         | DESIGN       | \$ 200,000     | 2027        |
|              |              |                             |               | RIGHT OF WAY | \$ 500,000     | 2028        |
|              |              | FUNDING SOURCE:             | STP           | UTILITIES    | \$ 75,000      | 2029        |
|              |              | TOTAL FUNDING 2005 to 2030: | \$3,335,000   | CONSTRUCTION | \$2,560,000    | 2030        |
| Auto-Lanes:  | 7            | BIKE FAC.:                  | YES           | OPERATIONS   |                |             |

The existing four-lane section will be widened to seven-lanes to meet current and projected traffic demands along this important corridor.

#### **CHAPTER 5 – PLAN RECOMENDATIONS**

| lewtown Pike US-25/KY-922 (Main Street to New Circle Rd.) |             |                             |             |              |                | Road Widening |  |
|---|-------------|-----------------------------|-------------|--------------|----------------|---------------|--|
| MPO ID #  | KYTC ITEM # | STATUS                      | ROUTE       | PHASE        | ANNUAL<br>COST | FISCAL YEAR   |  |
|   |             |                             |             |              |                |               |  |
| 052.03  | NA          | 2030 PLAN                   | KY-922      | DESIGN       | \$578,800      | 2017          |  |
|   |             |                             |             | RIGHT OF WAY | \$2,315,300    | 2018          |  |
|   |             | FUNDING SOURCE:             | STP         | UTILITIES    | \$1,157,600    | 2019          |  |
|   |             | TOTAL FUNDING 2005 to 2030: | \$9,261,000 | CONSTRUCTION | \$5,209,300    | 2020          |  |
| Auto-Lanes:   | 6           | BIKE FAC.:                  | YES         | OPERATIONS   |                |               |  |

The existing four-lane section will be widened to six-lanes to meet current and projected traffic demands in this corridor.

| New Circle Rd NE KY-4 (Georgetown Rd. to Richmond Rd) S |             | Signalized Portion          |              | Road Widening |                |             |
|---|-------------|-----------------------------|--------------|---------------|----------------|-------------|
| MPO ID #  | KYTC ITEM # | STATUS                      | ROUTE        | PHASE         | ANNUAL<br>COST | FISCAL YEAR |
|   |             |                             |              |               |                |             |
| 053.03  | NA          | 2030 PLAN                   | KY-4         | DESIGN        | \$2,315,300    | 2012        |
|   |             |                             |              | RIGHT OF WAY  | \$5,788,100    | 2013        |
|   |             | FUNDING SOURCE:             | STP          | UTILITIES     | \$2,315,300    | 2014        |
|   |             | TOTAL FUNDING 2005 to 2030: | \$46,305,100 | CONSTRUCTION  | \$35,886,400   | 2015        |
| Auto-Lanes:   | 6           | BIKE FAC.:                  | NO           | OPERATIONS    |                |             |

The existing four-lane section will be widened to six-lanes. In combination with widening, other design techniques will be used where appropriate to mitigate delay caused by left-turning vehicles and access points.

| New Circle Rd | ew Circle Rd. KY-4 (Richmond Rd. to Nicholasville Rd.) In Expressway Portion |                             |              |              |                |             |  |
|---------------|--|-----------------------------|--------------|--------------|----------------|-------------|--|
| MPO ID #      | KYTC ITEM #  | STATUS                      | ROUTE        | PHASE        | ANNUAL<br>COST | FISCAL YEAR |  |
|               |  |                             |              |              |                |             |  |
| 054.03        | NA   | 2030 PLAN                   | KY-4         | DESIGN       | \$4,050,000    | 2017        |  |
|               |  |                             |              | RIGHT OF WAY | \$5,209,000    | 2018        |  |
|               |  | FUNDING SOURCE:             | STP          | UTILITIES    | \$10,418,000   | 2019        |  |
|               |  | TOTAL FUNDING 2005 to 2030: | \$83,005,500 | CONSTRUCTION | \$63,328,500   | 2020        |  |
| Auto-Lanes:   | 8  | BIKE FAC.:                  | NO           | OPERATIONS   |                |             |  |

The existing four-lane section will be widened to eight-lanes to meet projected traffic demands.

#### **CHAPTER 5 – PLAN RECOMENDATIONS**

| Harrodsburg Rd. US-68 (Mason Headley Rd. to New Circle Rd.) |             |                             |             |              |                | Road Widening |  |
|---|-------------|-----------------------------|-------------|--------------|----------------|---------------|--|
| MPO ID #  | KYTC ITEM # | STATUS                      | ROUTE       | PHASE        | ANNUAL<br>COST | FISCAL YEAR   |  |
|   |             |                             |             |              |                |               |  |
| 056.03  | NA          | 2030 PLAN                   | US 68       | DESIGN       | \$250,000      | 2017          |  |
|   |             |                             |             | RIGHT OF WAY | \$4,500,000    | 2018          |  |
|   |             | FUNDING SOURCE:             | STP         | UTILITIES    | \$50,000       | 2019          |  |
|   |             | TOTAL FUNDING 2005 to 2030: | \$8,040,000 | CONSTRUCTION | \$3,240,000    | 2020          |  |
| Auto-Lanes:   | : 6         | BIKE FAC.:                  | YES         | OPERATIONS   | \$ -           |               |  |

The existing four-lane section will be widened to six-lanes to meet current and projected traffic demands in this important corridor.

| Tates Creek R | tes Creek Rd. KY-1974 (Malabu Drive to Armstrong Mill Road) |                             |             |              |                | Road Widening |  |
|---------------|---|-----------------------------|-------------|--------------|----------------|---------------|--|
| MPO ID #      | KYTC ITEM #   | STATUS                      | ROUTE       | PHASE        | ANNUAL<br>COST | FISCAL YEAR   |  |
|               |   |                             |             |              |                |               |  |
| 057.03        | NA  | 2030 PLAN                   | KY 1974     | DESIGN       | \$500,000      | 2012          |  |
|               |   |                             |             | RIGHT OF WAY | \$1,000,000    | 2013          |  |
|               |   | FUNDING SOURCE:             | STP         | UTILITIES    | \$ 50,000      | 2014          |  |
|               |   | TOTAL FUNDING 2005 to 2030: | \$3,270,000 | CONSTRUCTION | \$1,720,000    | 2015          |  |
| Auto-Lanes:   | 6   | BIKE FAC.:                  | YES         | OPERATIONS   | \$ -           |               |  |

The existing four-lane section will be widened to six-lanes to meet current and projected traffic demands in this highly developed commercial corridor.

| Tates Creek R | tes Creek Rd. KY-1974 (Armstrong Mill Rd.to Man o' War Boulevard) |                             |              |              |                |             |
|---------------|---|-----------------------------|--------------|--------------|----------------|-------------|
| MPO ID #      | KYTC ITEM #   | STATUS                      | ROUTE        | PHASE        | ANNUAL<br>COST | FISCAL YEAR |
|               |   |                             |              |              |                |             |
| 058.03        | NA  | 2030 PLAN                   | KY 1974      | DESIGN       | \$ 67,200      | 2017        |
|               |   |                             |              | RIGHT OF WAY | \$ 133,200     | 2018        |
|               |   | FUNDING SOURCE:             | STP          | UTILITIES    | \$ 67,200      | 2019        |
|               |   | TOTAL FUNDING 2005 to 2030: | \$ 1,598,900 | CONSTRUCTION | \$1,331,300    | 2020        |
| Auto-Lanes:   | 6   | BIKE FAC.:                  | YES          | OPERATIONS   | \$ -           |             |

The existing four-lane section will be widened to six-lanes and connect with the six-lanes at Armstrong Mill Road/Redding Road to meet current and projected traffic demands in this highly developed corridor.

| Versailles Rd. | ersailles Rd. US-60 (Woodford County Line to New Circle Rd.) |                             |              |              |                |             |
|----------------|--|-----------------------------|--------------|--------------|----------------|-------------|
| MPO ID #       | KYTC ITEM #  | STATUS                      | ROUTE        | PHASE        | ANNUAL<br>COST | FISCAL YEAR |
|                |  |                             |              |              |                |             |
| 059.03         | NA   | 2030 PLAN                   | US 60        | DESIGN       | \$ 750,000     | 2017        |
|                |  |                             |              | RIGHT OF WAY | \$ 10,000,000  | 2018        |
|                |  | FUNDING SOURCE:             | STP          | UTILITIES    | \$ 50,000      | 2019        |
|                |  | TOTAL FUNDING 2002 to 2025: | \$19,450,000 | CONSTRUCTION | \$ 8,650,000   | 2020        |
| Auto-Lanes     | : 6  | BIKE FAC.:                  | YES          | OPERATIONS   | \$ -           |             |

The existing four-lane section will be widened to six-lanes from the Woodford County Line to Keeneland and additional lanes as needed to New Circle Road to meet current and projected traffic demands in this important corridor.

| Versailles Rd. | US-60 (New  |                             | Road Widening |              |                |             |
|----------------|-------------|-----------------------------|---------------|--------------|----------------|-------------|
| MPO ID #       | KYTC ITEM # | STATUS                      | ROUTE         | PHASE        | ANNUAL<br>COST | FISCAL YEAR |
|                |             |                             |               |              |                |             |
| 059.03         | NA          | 2030 PLAN                   | US 60         | DESIGN       | \$750,000      | 2027        |
|                |             |                             |               | RIGHT OF WAY | \$ 10,000,000  | 2028        |
|                |             | FUNDING SOURCE:             | STP           | UTILITIES    | \$ 50,000      | 2029        |
|                |             | TOTAL FUNDING 2005 to 2030: | \$19,450,000  | CONSTRUCTION | \$8,650,000    | 2030        |
| Auto-Lanes:    | 6           | BIKE FAC.:                  | YES           | OPERATIONS   | \$ -           |             |

The existing four-lane section will be widened to six-lanes **from New Circle Road to Red Mile Road** to meet current and projected traffic demands in this important corridor.

| Keene Rd KY- | 169 (Harrod | sburg Rd. to Nicholasville Bypass |               | Road Widening |                |             |
|--------------|-------------|-----------------------------------|---------------|---------------|----------------|-------------|
| MPO ID #     | KYTC ITEM # | STATUS                            | ROUTE         | PHASE         | ANNUAL<br>COST | FISCAL YEAR |
|              |             |                                   |               |               |                |             |
| 060.03       | NA          | 2030 PLAN                         | KY 169        | DESIGN        | \$ 800,000     | 2027        |
|              |             |                                   |               | RIGHT OF WAY  | \$ 3,000,000   | 2028        |
|              |             | FUNDING SOURCE:                   | STP           | UTILITIES     | \$ 1,300,000   | 2029        |
|              |             | TOTAL FUNDING 2005 to 2030:       | \$ 11,500,000 | CONSTRUCTION  | \$6,400,000    | 2030        |
| Auto-Lanes:  | 3-4         | BIKE FAC.:                        | YES           | OPERATIONS    | \$ -           |             |

The existing two-lane section will be widened to three- to four-lanes to meet current and projected traffic demands in this important corridor.

| Keene Rd. KY | ene Rd. KY-169 (Nicholasville Bypass to Oak St.) |                             |             |              |                | Road Widening |  |  |
|--------------|--|-----------------------------|-------------|--------------|----------------|---------------|--|--|
| MPO ID #     | KYTC ITEM #                                      | STATUS                      | ROUTE       | PHASE        | ANNUAL<br>COST | FISCAL YEAR   |  |  |
|              |  |                             |             |              |                |               |  |  |
| 061.03       | NA   | 2030 PLAN                   | KY 169      | DESIGN       | \$ 500,500     | 2027          |  |  |
|              |  |                             |             | RIGHT OF WAY | \$ 572,000     | 2028          |  |  |
|              |  | FUNDING SOURCE:             | STP         | UTILITIES    | \$ 715,000     | 2029          |  |  |
|              |  | TOTAL FUNDING 2005 to 2030: | \$3,217,500 | CONSTRUCTION | \$ 1,430,000   | 2030          |  |  |
| Auto-Lanes:  | 3-4  | BIKE FAC.:                  | YES         | OPERATIONS   | \$ -           |               |  |  |

The existing two-lane section will be widened to three- to four-lanes to meet current and projected traffic demands in this important corridor.

| (Y-29 (Southern Railroad to Harrodsburg Rd.) |             |                             |              | Road Widen   |                |             |
|--|-------------|-----------------------------|--------------|--------------|----------------|-------------|
| MPO ID #                                     | KYTC ITEM # | STATUS                      | ROUTE        | PHASE        | ANNUAL<br>COST | FISCAL YEAR |
|  |             |                             |              |              |                |             |
| 062.03                                       | NA          | 2030 PLAN                   | KY 29        | DESIGN       | \$ 926,000     | 2027        |
|  |             |                             |              | RIGHT OF WAY | \$1,719,000    | 2028        |
|  |             | FUNDING SOURCE:             | STP          | UTILITIES    | \$ 661,000     | 2029        |
|  |             | TOTAL FUNDING 2005 to 2030: | \$11,241,000 | CONSTRUCTION | \$7,935,000    | 2030        |
| Auto-Lanes:                                  | : 3-4       | BIKE FAC.:                  | YES          | OPERATIONS   | \$ -           |             |

The existing two-lane section will be widened to three- to four-lanes to meet current and projected traffic demands and provide for safer travel in this important corridor.

| Spurr Rd. (Ge | purr Rd. (Georgetown Rd. to Masterson Station Residential Area Access) |                             |            |              |                |             |
|---------------|--|-----------------------------|------------|--------------|----------------|-------------|
| MPO ID #      | KYTC ITEM #  | STATUS                      | ROUTE      | PHASE        | ANNUAL<br>COST | FISCAL YEAR |
|               |  |                             |            |              |                |             |
| 063.03        | NA   | 2030 PLAN                   | KY 1977    | DESIGN       | \$ 104,000     | 2028        |
|               |  |                             |            | RIGHT OF WAY | \$ 150,000     | 2029        |
|               |  | FUNDING SOURCE:             | STP        | UTILITIES    | \$ 100,000     | 2030        |
|               |  | TOTAL FUNDING 2005 to 2030: | \$ 354,000 | CONSTRUCTION |                |             |
| Auto-Lanes:   | 3-4  | BIKE FAC.:                  | YES        | OPERATIONS   | \$ -           |             |

The existing two lane section will be widened to three to four lanes to meet current and projected traffic demands in this important corridor.

# **SUMMARY**

Total anticipated Non-SLX allocation from FY 2005 to 2030 \$ 398,652,274

# OTHER FEDERAL-AID FUNDING PROGRAMS

# **CMAQ – CONGESTION MITIGATION AIR QUALITY**

| LexTran/Univ | LexTran/Univ. of KY Transit Network |                             |                        |              | <b>Continuing Program</b> |             |  |
|--------------|-------------------------------------|-----------------------------|------------------------|--------------|---------------------------|-------------|--|
| MPO ID #     | KYTC ITEM #                         | STATUS                      | ROUTE                  | PHASE        | ANNUAL<br>COST            | FISCAL YEAR |  |
|              |                                     |                             |                        |              |                           |             |  |
| NA           | NA                                  | FY 05 – FY 08 TIP           |                        | DESIGN       |                           |             |  |
|              |                                     |                             |                        | RIGHT OF WAY |                           |             |  |
|              |                                     | FUNDING SOURCE:             | CMAQ                   | UTILITIES    |                           |             |  |
|              |                                     | TOTAL FUNDING 2005 to 2030: | \$ 2,150,000           | CONSTRUCTION |                           |             |  |
|              |                                     |                             | Yes, LexTran           |              |                           |             |  |
| Auto-Lanes:  | NA                                  | BIKE FAC.:                  | transports<br>bicycles | OPERATIONS   | \$ 2,150,000              | FY 2005     |  |

Other local match for the LexTran/U. of KY Transit Network includes \$410,000 for FY 05; \$360,000 annually in funds from the Univ. of KY and \$50,000 from LexTran farebox revenue. LexTran will provide in-kind match (marketing/PSAs) for the Reduced Fare Transit Program.

| Bikeway/Ped | Bikeway/Pedestrian Mobility |                             |           |              | Continuing Program |             |  |
|-------------|-----------------------------|-----------------------------|-----------|--------------|--------------------|-------------|--|
| MPO ID #    | KYTC ITEM #                 | STATUS                      | ROUTE     | PHASE        | ANNUAL<br>COST     | FISCAL YEAR |  |
|             |                             |                             |           |              |                    |             |  |
| NA          | NA                          | FY 05 – FY 08 TIP           |           | DESIGN       |                    |             |  |
|             |                             |                             |           | RIGHT OF WAY |                    |             |  |
|             |                             | FUNDING SOURCE:             | CMAQ      | UTILITIES    |                    |             |  |
|             |                             | TOTAL FUNDING 2005 to 2030: | \$ 52,400 | CONSTRUCTION |                    |             |  |
| Auto-Lanes  | : NA                        | BIKE FAC.:                  | NA        | OPERATIONS   | \$ 52,400          | FY 2005     |  |

Local match provided by the LFUCG.

| Fiber Optic Ca | iber Optic Cable Installation |                               |             |              | Continuing Pr  |              |  |
|----------------|-------------------------------|-------------------------------|-------------|--------------|----------------|--------------|--|
| MPO ID #       | KYTC ITEM #                   | STATUS                        | ROUTE       | PHASE        | ANNUAL<br>COST | FISCAL YEAR  |  |
|                |                               | FY 05 – FY 08 TIP             |             |              |                |              |  |
| NA             | NA                            | Funding is for four years at  |             | DESIGN       |                |              |  |
|                |                               | \$400,000 per year            |             | RIGHT OF WAY |                |              |  |
|                |                               | FUNDING SOURCE:               | CMAQ        | UTILITIES    | ±400 000       | FY 2005 thru |  |
|                |                               | TOTAL FUNDING 2005 to 2030:   | \$1,600,000 |              | \$400,000      | FY 2008      |  |
|                |                               | 101AL 1011D1110 2003 to 2030. | Ψ1,000,000  | CONSTRUCTION |                |              |  |
| Auto-Lanes:    | : NA                          | BIKE FAC.:                    | NA          | OPERATIONS   |                |              |  |

Local match provided by the LFUCG.

| ITS Strategic | Deployment  | Plan                         | Continuing Progra |              |                |                         |
|---------------|-------------|------------------------------|-------------------|--------------|----------------|-------------------------|
| MPO ID #      | KYTC ITEM # | STATUS                       | ROUTE             | PHASE        | ANNUAL<br>COST | FISCAL YEAR             |
|               |             | FY 05 – FY 08 TIP            |                   |              |                |                         |
| NA            | NA          | Funding is for four years at |                   | DESIGN       |                |                         |
|               |             | \$200,000 per year           |                   | RIGHT OF WAY |                |                         |
|               |             | FUNDING SOURCE:              | CMAQ              | UTILITIES    |                |                         |
|               |             | TOTAL FUNDING 2005 to 2030:  | \$800,000         | CONSTRUCTION |                |                         |
| Auto-Lanes    | :: NA       | BIKE FAC.:                   | NA                | OPERATIONS   | \$ 200,000     | FY 2005 thru<br>FY 2008 |

Local match provided by the LFUCG.

| Purchase of H | ybrid Vehicle |   | Continuing Program |              |                |             |
|---------------|---------------|---|--------------------|--------------|----------------|-------------|
| MPO ID #      | KYTC ITEM #   | STATUS  | ROUTE              | PHASE        | ANNUAL<br>COST | FISCAL YEAR |
|               |               |   |                    |              |                |             |
| NA            | NA            | FY 05 – FY 08 TIP<br>Funding is for FY 2005 at \$30,000 |                    | DESIGN       |                |             |
|               |               | 1 and 1 g 15 161 1 1 2 5 5 4 2 4 5 5 7 5 5 5            |                    | RIGHT OF WAY |                |             |
|               |               | FUNDING SOURCE:   | CMAQ               | UTILITIES    |                |             |
|               |               | TOTAL FUNDING 2005 to 2030:                             | \$ 30,000          | CONSTRUCTION |                |             |
| Auto-Lanes:   | NA            | BIKE FAC.:  | NA                 | OPERATIONS   | \$ 30,000      | FY 2005     |

Local match provided by the LFUCG.

| New Passeng | er Vans for tl | he LexVan Fleet             |            | Continuing Program |                |             |
|-------------|----------------|-----------------------------|------------|--------------------|----------------|-------------|
| MPO ID #    | KYTC ITEM #    | STATUS                      | ROUTE      | PHASE              | ANNUAL<br>COST | FISCAL YEAR |
|             |                |                             |            |                    |                |             |
| NA          | NA             | FY 05 – FY 08 TIP           |            | DESIGN             |                |             |
|             |                |                             |            | RIGHT OF WAY       |                |             |
|             |                | FUNDING SOURCE:             | CMAQ       | UTILITIES          |                |             |
|             |                | TOTAL FUNDING 2005 to 2030: | \$ 116,000 | CONSTRUCTION       |                |             |
| Auto-Lanes: | : NA           | BIKE FAC.:                  | NA         | OPERATIONS         | \$ 116,000     | FY 2005     |

Local match provided by LexVan passenger monthly lease payments.

| CMAQ Project | MAQ Project Placeholder for |                              |           |              |                | Continuing Progran      |  |  |
|--------------|-----------------------------|------------------------------|-----------|--------------|----------------|-------------------------|--|--|
| MPO ID#      | KYTC ITEM #                 | STATUS                       | ROUTE     | PHASE        | ANNUAL<br>COST | FISCAL YEAR             |  |  |
|              |                             | FY 05 – FY 08 TIP            |           |              |                |                         |  |  |
| NA           | NA                          | Funding is for four years at |           | DESIGN       |                |                         |  |  |
|              |                             | \$100,000 per year           |           | RIGHT OF WAY |                |                         |  |  |
|              |                             | FUNDING SOURCE:              | CMAQ      | UTILITIES    |                |                         |  |  |
|              |                             | TOTAL FUNDING 2005 to 2030:  | \$400,000 | CONSTRUCTION |                |                         |  |  |
| Auto-Lanes   | : <sub>NA</sub>             | BIKE FAC.:                   | NA        | OPERATIONS   | \$100,000      | FY 2005 thru<br>FY 2008 |  |  |

Local match provided by the LFUCG.

# **SUMMARY**

Total anticipated CMAQ allocation from FY 2005 to 2008 \$ 5,148,400

# TE - FEDERAL TRANSPORTATION ENHANCEMENT

| South Elkhorn Trail (Nicholasville Rd. to Grassy Creek Rd) |             |                                   |  |         |              |    |         | Greenway Trail |
|--|-------------|-----------------------------------|--|---------|--------------|----|---------|----------------|
| MPO ID #   | KYTC ITEM # | STATUS                            |  | ROUTE   | PHASE        |    | COST    | FISCAL YEAR    |
|  |             | Recommended FY                    |  |         |              |    |         |                |
| 032.15A  | 229.20      | 2005FY 2010 Six-                  |  | TRAIL   | DESIGN       | \$ | -       |                |
|  |             | Year Plan & FY<br>2005FY 2008 TIP |  |         | RIGHT OF WAY | \$ | 25,000  |                |
| _  |             |                                   |  |         | UTILITIES    | \$ | -       |                |
| <b>TOTAL FUNDING 2005 to 2030:</b> \$ 281,000              |             |                                   |  | 281,000 | CONSTRUCTION | \$ | 281,000 | 2005           |
|  |             |                                   |  |         | OPERATIONS   | \$ | -       |                |

Construction of a South Elkhorn Creek Greenway Trail near the South Elkhorn Creek: from Newberry Way to Shillito Park Road. The SLX portion of this project, from Waveland Historic Site to Newberry Way, is programmed for Construction in FY 2004 and is identified as KYTC Item # 229.10.

# **SUMMARY**

Total anticipated TE allocation from FY 2005 to 2008 \$ 281,000

Figure 5.10: SLX PROJECT MAP

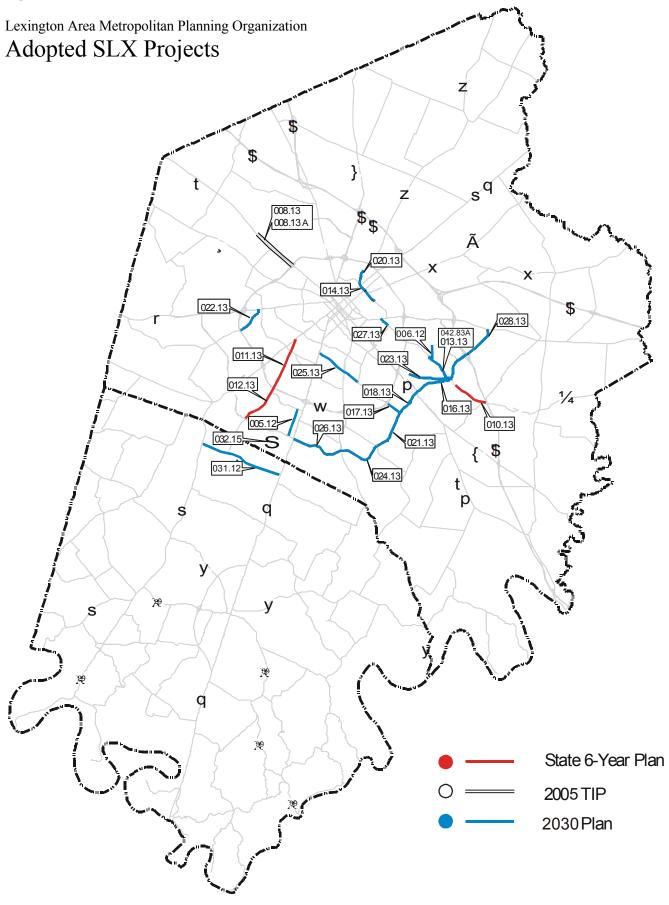
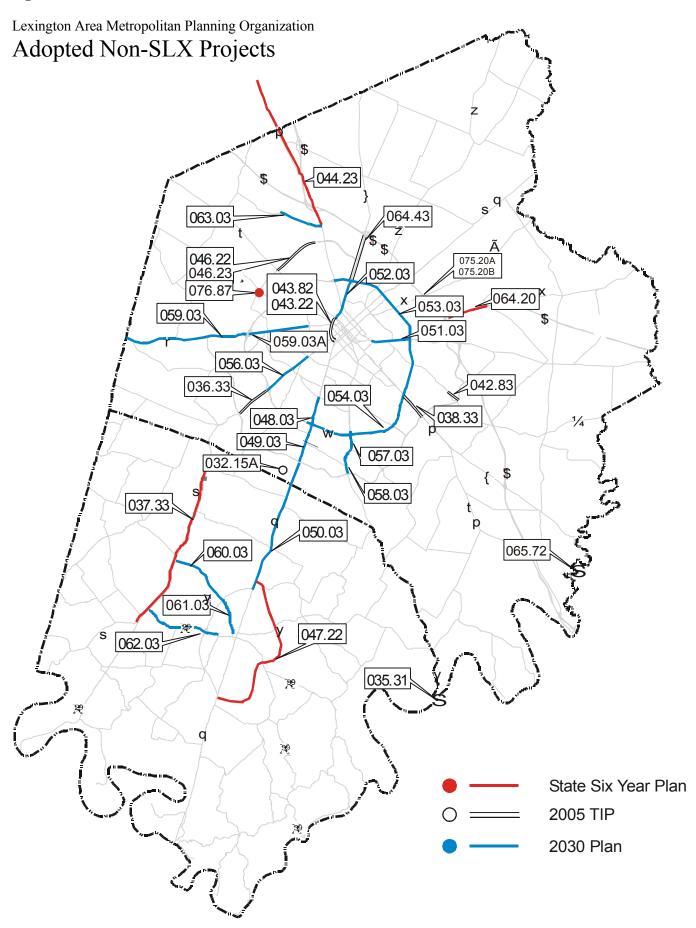


Figure 5.11: NON-SLX PROJECT MAP



#### **CHAPTER 5 - PLAN RECOMENDATIONS**

#### **PARATRANSIT**

The local paratransit service is provided through a contract with LexTran. This service is in conformance with the requirements of the Americans with Disabilities Act of 1990. The last update of the local paratransit plan was submitted in January 1996. The FTA determined that the Lexington area's 1996 Americans with Disabilities (ADA) Paratransit Plan Update was in compliance with Federal regulations, and that future updates were not required. Instead, the Lexington Transit Authority signs an annual assurance that shows continued compliance with requirements in order to receive FTA funding.

The 1996 Plan showed increased demand for paratransit for future years. Through equipment purchases and rehab of older vehicles, the LexTran fleet has been fully accessible since 1998. The increased accessibility of the fixed route system is expected to help meet the growing demand for paratransit service in future years. Continued upgrading of the paratransit and fixed route fleets will be required during the plan period to maintain the quality of service to the disabled population.

It is recommended that this paratransit service continue to be provided for all of Fayette County. The alternative of reducing the service area to only the required 3/4 mile radius around the fixed routes would negatively impact the quality of service for the disabled community

#### MOBILITY COORDINATION ELEMENT

The establishment of the Lexington Bluegrass Mobility Office provides the opportunity to expand transportation coordination efforts and work in multimodal transportation, air quality, public involvement/outreach/education, and the continued growth of the MPO's employer based/general public ridesharing program. The following recommendations describe the work activities that will increase the public participation in the services of the Lexington Bluegrass Mobility Office.

It is recommended that a direct and indirect marketing plan be implemented and maintained throughout the plan period. The program is intended to promote increased awareness of and participation in the services of the Lexington Bluegrass Mobility office. The promotional plan will include carpools, vanpools, transit, bicycling, walking, and telecommuting. Promotional efforts are anticipated to cost approximately \$52,000 annually.

Marketing products will include such items as customized site-specific surveys, information folders, air quality handbooks, brochures and promotional items. Other promotional expenses will include media and broadcast costs for the public awareness campaign.

It is further recommended that new ridematching software be purchased to replace the existing out of date and unsupported software package - Geo Match. This system is remaining in use on only one aging computer with no service support, product development, or ability to update the maps and capabilities. The Mobility Office has researched purchasing new software extensively but the costs have been well above the current funds that are available. Recently, the MPO together with the Kentucky Transportation Cabinet has looked into acquisition of RidePro for all Kentucky MPO's that are in need of ride matching software. We strongly recommend that this effort be supported for the continuance and expansion of this very important service that is offered to the entire Bluegrass Region. Costs associated with this effort are currently under negotiation and unknown.

An important incentive for people to try alternative methods of transportation is the establishment of a Guaranteed Ride Home Program (GRHP). The GRHP, established in FY 1999, takes the anxiety out of leaving your car at home. People that carpool or vanpool will no longer need to worry about being stranded at work, without a car, when they have an emergency. Continued operation of the program is estimated to cost \$5,000 annually.

In light of air quality concerns, the MPO will continue the voluntary Ozone reduction program. This program increases public awareness of the harmful effects of ground level ozone. The Ozone prevention activities will be coordinated with, and further promote the activities and work elements of the Mobility Office. The Mobility Office will continue to promote an array of Ozone reduction commute options. This includes carpooling, vanpooling, transit, Telecommuting, walking and bicycling.

It is recommended that the Mobility Office continue and expand the very successful LexVan Commuter Vanpool Program. This will require the purchase of new vehicles for the LexVan fleet. With the aging of the LexVan fleet,

#### **CHAPTER 5 - PLAN RECOMENDATIONS**

this will require the purchase of several vans to update the fleet to the standards of the LFUCG's Division of Risk Management (the current insurance provider for the LexVan program). With the transfer of the LexVan program from LexTran to the LFUCG/Lexington Area MPO, dedicated funding for replacement vans is now tenuous due to the reliance on LexTran for FTA 5307 funds. These funds are currently being used primarily for buses and other LexTran vehicles. Although the need for transit in our community is strongly supported by the Mobility Office, funds will be needed for the updating of the aging LexVan fleet. It is recommended that dedicated funding be put in place for the upkeep of the LexVan program for the safety and security of it's riders, as well as to insure that the beneficial program continue to operate and grow.

Another focus of the LexVan Program will be to build upon the initial success of the LexVan Welfare to Work transportation program. The Mobility Office will provide assistance to governmental, social service, and other community organizations that are addressing the problems associated with welfare reform. The office will seek to continually improve coordination of transportation services required by these groups.

#### BICYCLE AND PEDESTRIAN RECOMMENDATIONS

Concerns about traffic congestion, air quality and public health are increasing at both the local and national level. In the search for solutions, there has been an emerging realization that transportation alternatives, such as bicycling and walking, have essentially been engineered out of Americans lives. Over the past several decades, roadways throughout the country, including the Lexington area, have been designed and constructed primarily for the automobile. There are many barriers to bicycling and walking in our community including land use patterns that separate residential, commercial and retail zones; wide roadways; large traffic volumes; high speeds; narrow curb lanes; and missing sidewalks. These barriers have made bicycling and walking uncomfortable at best, and even dangerous at some locations.

Cities with programs, policies and funding in place to improve conditions for bicycling and walking have enhanced bicycle and pedestrian safety in their communities, while making travel by these modes more enjoyable. In response, the number of such trips has increased. Similar to those communities, the Lexington area has a number of traits that are favorable to increasing the number of bicycling and walking trips including a moderate climate, the presence of a large university, a high proportion of the population commuting five miles or less, and an approach to land use favoring compact development. Taking advantage of this potential will require a cooperative effort at the state and local levels to overcome the barriers to bicycle and pedestrian travel. Improvements are necessary to meet the needs of a diverse group of users including advanced cyclists, casual riders, children, the elderly and the disabled. Accommodating the greatest number of user groups will yield the largest increase in bicycling and walking trips and potentially reduce the greatest number of related crashes.

To achieve and promote a safe, efficient bicycle and pedestrian transportation network, and develop an effective education and enforcement program, the following is recommended:

#### **Comprehensive Bicycle and Pedestrian Plans**

Comprehensive bicycle and pedestrian plans foster the development of successful multimodal programs. Plans should identify desired bicycle and pedestrian networks, establish guidelines for facility development and outline strategies for plan implementation. It is recommended that municipalities in the MPO region develop such plans. A comprehensive bicycle and pedestrian planning process is scheduled to begin shortly for Lexington-Fayette County. A similar plan for Jessamine should also be completed.

**Regional rural road bike route system:** Identifying and developing a rural road bike route system will create a more comprehensive, identifiable and safe system of connections and routes throughout the rural portions of the region. Within the MPO, a study of rural roadways should be conducted to determine their bicycle suitability based on roadway width, traffic volume, availability of shoulders, sight distance problems and other factors. Ideally, the study will include all of the counties adjacent to Lexington.

#### **Bicycle and Pedestrian Program Coordination**

There are many parties involved in creating bicycle and pedestrian friendly communities including roadway engineers, traffic engineers and land use planners. A number of organizations and advocacy groups also have a stake in bicycle and pedestrian issues including local schools, colleges, parks departments, neighborhoods and

#### **CHAPTER 5 - PLAN RECOMENDATIONS**

public health groups. Coordination with decision-makers and stakeholders should be assigned to a bicycle and pedestrian coordinator. The focus of the coordinator's efforts should be on the development of bicycle and pedestrian facilities, educational programs, encouragement programs and the enforcement of laws and regulations. Ideally, the coordinator would be a full-time position. Funding for such a position is currently provided, in part, through a Congestion Mitigation and Air Quality (CMAQ) grant; however permanent funding sources should be secured to continue program coordination once grant funds have been expended. A recommendation to integrate the bicycle and pedestrian coordinator into the MPO UPWP element has been discussed by MPO staff.

#### **Bicycle and Pedestrian Facility Improvements**

A bicycle and pedestrian friendly transportation system that will accommodate all users requires further development of on-street and off-street facilities. It is recommended that physical improvements to the bicycle and pedestrian network occur in the following ways:

**New construction and reconstruction projects:** Bicycle and pedestrian facilities should be considered in the construction of all new roadways. In addition to state sponsored projects, local jurisdictions should request that roads constructed during residential and commercial development also include bicycle and pedestrian facilities where appropriate. If bicycle and pedestrian facilities are not constructed at the time of development, adequate right-of-way should be dedicated for future facilities.

Rehabilitation of existing roadways should include improvements for all alternative modes of transportation. Reconstruction and repaving projects offer an excellent opportunity to retrofit streets with bicycle and pedestrian facilities. These improvements should be incorporated into all state, MPO, and locally sponsored projects to the fullest extent possible. Incorporating bicycle and pedestrian facilities should be considered as early in the decision-making process as possible. To achieve this, it may be necessary for local jurisdictions within the MPO to adopt a formal review processes for locally planned right-of-way projects, including repaving, storm water and sanitary sewer projects.

The Bicycle Pedestrian Advisory Committee has reviewed the following projects as proposed in the *Year 2030 Long Range Transportation Plan* and has made the following recommendations for potential bicycle/pedestrian treatments.

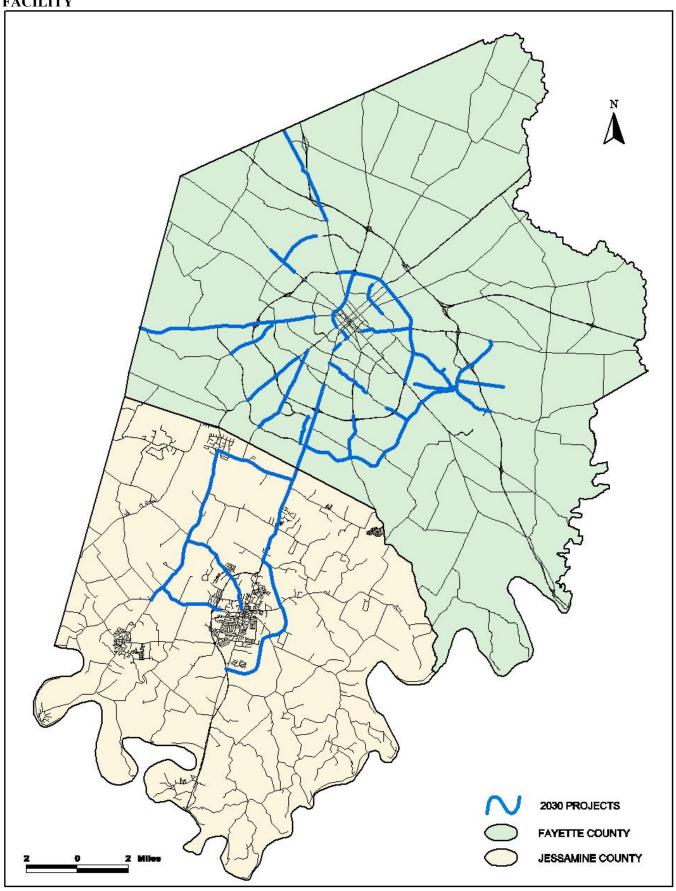
Figure 5.12: Recommended Bicycle/Pedestrian Treatments for Year 2030 Transportation Plan Projects

|        | e 5.12: Recommended Bicycle/Pedestrian Treatments                     |      | Posammandad Picycla and for Podastrian |    |    |     |    |  |
|--------|---|------|--|----|----|-----|----|--|
| MPO    | TRANSPORTATION PROJECT  | CONS | Treatment                              |    |    |     |    |  |
| ID#    |   | YEAR | BL                                     | WC | PS | SUP | SW |  |
| 037.33 | Harrodsburg Rd. US-68 (KY 29 to Brannon Rd.)                          | 2006 | х                                      | х  | х  |     |    |  |
| 008.13 | Leestown Rd. (New Circle Rd. to Masterson Park)                       | 2006 | х                                      | х  | х  | х   | х  |  |
|        | Liberty KY-1927/Todds Rd. – Cadentown Bypass                          | 2007 | х                                      |    |    |     |    |  |
| 046.22 | Citation Boulevard - Phase II (Southern RR to Leestown Rd.)           | 2008 |  |    | х  | х   | х  |  |
| 010.13 | Liberty/Todds Rd. (0.2 miles South of Forest Hill Dr. to I-75)        | 2008 | х                                      |    |    |     |    |  |
|        | Newtown Pike Extension  | 2009 | х                                      |    |    |     | х  |  |
| 012.13 | Clays Mill Road (New Circle Road to Man o' War Blvd.)                 | 2010 | х                                      | х  |    |     |    |  |
|        | Clays Mill Road (Harrodsburg Rd. to New Circle Road)                  | 2011 | Х                                      | х  |    |     | х  |  |
|        | Starshoot Parkway (connection to Liberty Rd.)                         | 2015 | Х                                      | х  |    |     | х  |  |
|        | Georgetown Rd. US-25 (Spurr Rd to Etter Ln.)                          | 2015 | Х                                      | х  | х  |     |    |  |
| 047.22 | East Nicholasville Bypass (Phase I)                                   | 2015 |  |    | х  |     |    |  |
| 005.12 | Fayette Mall Road (Man o' War Blvd. to West Reynolds Rd)              | 2015 | х                                      | х  |    |     | х  |  |
|        | Harrodsburg Rd. US-68 ( New Circle Rd. to Man o' War Boulevard)       | 2015 | Х                                      | х  | х  | Х   | х  |  |
| 048.03 | Nicholasville Rd. US-27 (Southland Drive to New Circle Rd.)           | 2015 | Х                                      | х  |    |     |    |  |
|        | Nicholasville Rd. US-27 (Man o'War Boulevard to Nicholasville Bypass) | 2015 | х                                      | х  |    |     |    |  |
| 057.03 | Tates Creek Rd. KY-1974 (Malabu to Armstrong Mill Rd.)                | 2015 | х                                      | х  |    |     |    |  |
|        | Man o' War Boulevard (I-75 to Richmond Road)                          | 2015 | х                                      |    |    | х   |    |  |
| 017.13 | Alumni Drive (Edgewater Drive to Man o' War Boulevard)                | 2015 | х                                      |    |    |     |    |  |
|        | Nicholasville Rd. US-27 (New Circle Rd. to Man o'War Boulevard)       | 2015 | х                                      | х  |    |     | х  |  |
|        | New Circle Rd. NE KY-4 (Georgetown Rd. to Richmond Rd.)               | 2015 | х                                      | х  | х  |     | х  |  |
| 021.13 | Man o' War Blvd. (Richmond Rd. to Armstrong Mill Rd.)                 | 2016 | х                                      |    |    | х   |    |  |
| 013.13 | Liberty Road (New Circle Road to Church of God)                       | 2019 | Х                                      |    |    |     |    |  |
|        | Loudon Avenue (Russell Cave Road to Oakhill Drive)                    | 2020 | х                                      |    |    |     |    |  |
| 020.13 | Russell Cave Road - Park Place to North Broadway                      | 2020 | х                                      |    |    |     | х  |  |
| 056.03 | Harrodsburg Rd. US-68 (Mason Headley Rd. to New Circle Rd.)           | 2020 | Х                                      | х  |    |     |    |  |
|        | Parkers Mill Rd. (Versailles Rd. to Man o' War Blvd.)                 | 2020 | Х                                      |    |    |     |    |  |
|        | Newtown Pike US-25/KY-922 (Main Street to New Circle Rd.)             | 2020 | Х                                      |    |    |     |    |  |
| 023.13 | Todds Rd. (Codell Drive to Man o' War Boulevard)                      | 2020 | х                                      |    |    |     | х  |  |
| 059.03 | Versailles Rd. US-60 (Woodford County Line to Red Mile Rd.)           | 2020 | Х                                      | х  | х  |     |    |  |
|        | Tates Creek Rd. KY-1974 (Armstrong Mill Rd.to Man o' War Blvd)        | 2020 | Х                                      |    |    |     |    |  |
|        | Alumni Dr. (Nicholasville Rd. to Chinoe Rd.)                          | 2020 | х                                      |    |    |     |    |  |
| 061.03 | Keene Rd. KY-169 (Nicholasville Bypass to Oak St.)                    | 2029 | х                                      | х  |    |     |    |  |
|        | Winchester Rd. US-60 (Midland Avenue to New Circle Rd)                | 2030 | х                                      | х  |    |     |    |  |
|        | KY-29 (Southern Railroad to Harrodsburg Rd.)                          | 2030 | х                                      | х  |    |     |    |  |
|        | Man o' War Blvd. (Armstrong Mill Rd. to Tates Creek Rd.)              | 2030 | х                                      |    |    | х   |    |  |
|        | Keene Rd KY-169 (Harrodsburg Rd. to Nicholasville Bypass)             | 2030 | х                                      |    |    |     |    |  |
|        | Man o' War Blvd. (Tates Creek Rd. to Nicholasville Rd.)               | 2030 | Х                                      |    |    |     |    |  |
| 028.13 | Man o' War Boulevard (I-75 to Winchester Rd.)                         | 2030 | Х                                      |    |    | Х   |    |  |
| 031.12 | Brannon Rd. (US-68 to US-27)  | 2030 |  |    | Х  |     | X  |  |
|        | Versailles Rd. US-60 (New Circle Rd. to Red Mile Rd.)                 | 2030 | Х                                      | х  | х  |     | х  |  |

KEY: BL Bike lanes WC Wide curb lanes PS Paved shoulder

**SUP** Shared Use Path **SW** Sidewalks

Figure 5.13: ROADWAY PROJECTS WITH A RECOMMENDED BICYCLE AND/OR PEDESTRIAN FACILITY



**Restriping and repaving projects**: Many roadways in the MPO region do not require major or minor construction to better accommodate bicyclists. The MPO, with assistance from the BPAC, should determine which roadways could be restriped to create, where appropriate, a bicycle lane or wide curb lane, without significantly affecting motor vehicle traffic. Bicycle level of service updates may provide opportunities to reexamine roadway striping patterns. In particular, repaving projects offer an excellent opportunity to restripe lanes in bicycle friendly configurations, often at little or no additional cost; however, roadways are generally only repaved every few years, and often only short segments are repaired at a time. Funding for restriping, not incidental to repaving projects, should be explored at the local, state and MPO level.

**Pedestrian facility improvements:** Based on preliminary data from a pedestrian facility inventory, the MPO region is not adequately providing safe and accessible pedestrian facilities as required by the Americans with Disabilities Act. It is recommended that data collection and analysis continue to identify pedestrian facility deficiencies and indicate where improvements are necessary. All collectors and arterials within urban areas should be constructed or retrofitted with sidewalks and ADA compliant intersections. In addition, all transit routes should have sidewalks leading to and from the stops. While sidewalk improvements are usually performed by property owners, the responsibility of installing and maintaining curb ramps generally falls to those who build and maintain the roadways. With assistance from BPAC, the MPO should work with local agencies to improve development policy and locate funding for needed improvements.

**Development of off-road facilities:** In 2002, the *Greenway Master Plan* was adopted by the Lexington-Fayette County Government. The plan proposes a network of on-road and off-road (shared use path) facilities to provide alternative transportation routes to and from the urban core and surrounding counties. In conjunction with on-road projects, off-road facilities will provide a foundation for a comprehensive bicycle and pedestrian network. The off-road facilities will also appeal to less experienced cyclists who prefer to ride away from traffic. With assistance from the BPAC, the MPO should examine ways to fund such off-road projects.

**Other physical improvements/amenities:** There are many ways in which the MPO can continually work to improve conditions for bicycling and walking:

**Bicycle parking** – The BPAC has installed over 200 bicycle racks in public places throughout the Lexington area. The committee should continue to encourage private property owners to install bicycle parking at their places of business. Local municipalities should also explore incentives for business owners, such as requiring fewer parking spaces when bicycle racks are present. In addition, the MPO should continue to explore the option of providing bicycle lockers at appropriate locations such as the Transit Center.

**Bicycle hazard removal** – There are many hazards that cyclists often encounter and report to local jurisdictions. In particular, drainage grates can be hazardous to cyclists. Roadway construction and repaving projects should include bicycle-safe drainage grates that are flush with the roadway surface. Railroad crossing are potential hazards and debris collecting in outside traffic lanes is a safety concern. The MPO should seek funding for a bicycle hazard removal program.

**Bicycle detection** – Many bicyclists are discouraged when they are not detected at traffic signals; they are forced to wait for approaching vehicles, or proceed against the light. Intersections where video devices are installed should be programmed to detect cyclists (to the far right) and tested periodically. The BPAC should continue to explore solutions to bicycle detection at intersections where "loop" devices are in place.

**Bikes and transit** – All Lexington Transit Authority buses are equipped with bicycle racks. By combining transit and bicycle travel, users can expand their range of distance and reduce travel time. The MPO should continue to support the "Bike & Ride" program. Bicycle parking alternatives at transit stops should also be explored.

#### **Education and Encouragement**

As an ongoing task, the MPO, BPAC and local jurisdictions should work to educate area residents about the benefits of bicycling and walking, the location of designated facilities, the suitability of roadways for bicycle travel, local traffic laws, and bicycle and pedestrian safety. Information should be distributed in a variety of ways including bike route maps, suitability maps, websites, brochures, special event presentations, through the media and other local outlets. Dedicated funding for promotional and educational materials should be explored by the MPO, state and local governments. Sponsors and/or local funding should be obtained for promotional events and programs such as Bike month, the Bike Lexington rally, a Safe Routes to School program and a guaranteed ride home program for alternative mode commuters.

#### **Enforcement**

To facilitate safe and appropriate use of the transportation system, the MPO, BPAC and local jurisdictions should continue to work with area police departments to educate motor vehicle operators, bicyclists and pedestrians about the rules of road and to enforce lawful behavior. With the MPO's input and support, law enforcement agencies should be allowed to take ownership of this effort. Without law enforcement's buy-in the enforcement of existing and future bicycle and pedestrian regulations and guidelines will not be realized.

#### **Bicycle & Pedestrian Advisory Committee**

In late 1999, the Bicycle- Pedestrian Advisory Committee (BPAC) was formed as a recommendation of the Year 2018 Transportation Plan. The purpose of the BPAC is to advise, provide technical guidance and recommendations to the MPO to promote bicycling and pedestrian opportunities as part of a comprehensive, coordinated, multimodal transportation process; to include the following:

- develop, review and/or comment on proposed goals, policies, plans, studies or other work elements as part of the MPO bicycle and pedestrian transportation planning process;
- improve and enhance coordination of national, state, regional, and local government practices to work towards a regionally consistent bicycle and pedestrian system;
- facilitate the communication, coordination and understanding between the public, policy/decision makers, transportation related agencies, and all other parties involved in or affected by the MPO bicycle and pedestrian planning process. This includes a forum for citizen input and dissemination of information; and
- facilitate Federal, State and other funding opportunities for Bicycle and Pedestrian projects and programs.

#### **Summary**

The MPO has taken many steps to accommodate and promote bicycle and pedestrian travel. The MPO, BPAC, state and local governments should continue to support ongoing efforts and work to enhance the bicycle and pedestrian program. The greatest success will result from a funded community program that includes a bicycle and pedestrian coordinator, a facilities plan, promotion and educational programs, and the enforcement of laws and regulations.

#### AVIATION IMPROVEMENT PLANS

For complete and comprehensive information on aviation in the Lexington planning area, refer to the *Blue Grass Airport Master Plan Update*. This document, created by the Lexington-Fayette Urban County Airport Board, contains detailed information on the existing airport, future projections, plan alternatives, and recommendations. For more up-to-date information, please visit the Blue Grass Airport website at <a href="https://www.bluegrassairport.com">www.bluegrassairport.com</a>.

#### **PASSENGER RAIL**

Analysis prepared for the previous two Plan Updates indicated that passenger rail was not a feasible transportation alternative for the Lexington area at that time. That finding continues to hold true today and the outlook is expected to remain the same through the planning period. After the 2018 Plan, the Kentucky Transportation Cabinet (KTC) examined the possibility of inter-urban passenger rail service in more detail. As discussed in the chapter on transportation alternatives, the consultant's study in 1999 indicated that passenger rail was not a viable option for this area. This assessment is related to low population density and low concentration of urban development, combined with the high capital and operating costs associated with developing a passenger rail system. The feasibility of light rail service should be further examined in future updates of the transportation plan. In addition, the feasibility of Rapid Bus Transit should be examined, as funding becomes available. This option would provide a dedicated route for bus use, ensure the frequency of service, and eliminate traffic barriers.

It is also recommended that the state continue analysis of the feasibility for development of AMTRAK and interurban passenger rail service in Central Kentucky. The Kentucky Transportation Cabinet Division of Multimodal Programs should lead this effort.

#### FREIGHT MOVEMENT

The adopted highway plan is intended to serve truck carriers for the efficient movement and supply of goods as well as it serves passenger automobiles and other types of vehicles. Newtown Pike from I-64/I-75 is one of our most utilized truck routes. A project to begin the design phase of an improvement project along this corridor in 2007 is programmed in the current TIP and this plan. To date, the Lexington area MPO does not appear to have severe truck carrier problems and conflicts. However, to relieve conflict between truck traffic and areas of the community where truck traffic is inappropriate, it is recommended to continue the existing methods explained in Chapter 3-Existing Transportation System. These methods include: Sign restriction of truck movements; enforcement; established truck route systems (by city ordinances); on and off-street loading/unloading zones, facilities, restrictions and regulations. These methods will be reexamined to make urban goods movement a priority of the area's transportation planning process as future demand increases. Truck traffic problems will be continually monitored through the transportation planning process. All Lexington MPO area committees and government agencies involved with different aspects of transportation, as well as citizens, have input into the existing planning process.

#### UNFUNDED NEEDS PLAN

Appendix 4 contains a listing of unfunded transportation needs that are not a part of the financially balanced, air quality conforming *Year 2030 Transportation Plan*. It is recognized that not all transportation system deficiencies can be remedied with available funding and that the adopted plan prescribes the best use of these funds. Therefore, all the other needs that are identified via the local planning process, by the Transportation Technical Coordinating Committee, and by the Kentucky Transportation Cabinet have been listed in the Unfunded Needs Plan. This plan is updated/revised biannually.

#### PLAN IMPLEMENTATION

#### TRANSPORTATION IMPROVEMENT PROGRAM PROCESS

The document used to direct implementation of the Year 2030 Long Range Transportation Plan will be the Transportation Improvement Program (TIP). The Lexington Area Metropolitan Planning Organization, in cooperation with the Kentucky Transportation Cabinet, and affected transit operators, will annually develop a TIP. This program will be amended on an as needed basis according to a schedule established by the MPO staff and approved by the Transportation Policy Committee. The purpose of this document is to develop a priority list of projects to be carried out within a four-year period following the adoption of each TIP. The TIP is required to contain a financial plan that demonstrates how TIP projects will be scheduled and financed with the fiscal resources likely to be available. Projects that have been implemented are dropped from the TIP project listing as new projects are identified from the Year 2030 Long Range Transportation Plan and added to the listing during the annual TIP update/revision process. Projects consistent with the Congestion Management System (CMS) must also be included in the TIP.

The annual update of the TIP will be coordinated with the Kentucky Transportation Cabinet so that the *State Six Year Highway Plan* and the *State Transportation Improvement Program* (STIP) are in agreement with the MPO's TIP. This process will include public input as outlined in the MPO *Public Participation Process* document.

CHAPTER 6 AIR QUALITY



# AIR QUALITY CONFORMITY

With mobility/travel come concerns about the impact that transportation plans have on the environment. Vehicles (or mobile sources) are a major source of urban air pollution. Though technology has and will continue to reduce vehicle pollution, people are driving more than in the past. There are more vehicles on the road and thus more miles driven than ever before. It is likely that these trends will continue. This chapter explains transportation planning's connection with air quality, the air quality analysis, and the methodology used by the Lexington Area MPO and the Kentucky Transportation Cabinet (KYTC) to demonstrate conformity with air quality standards/goals established by the Clean Air Act Amendments of 1990.

# Air Quality Forecasting and Monitoring:

An additional area of consideration is the forecasting and monitoring of the Air Quality in the Central Kentucky area. The Lexington Area MPO staff uses an Ozone Forecasting model during the Ozone season, May - September, to predict the Air Quality Index level for the next day. The forecast and report is emailed daily to the media and local, state and federal government officials. A 3-day forecast was completed on Fridays. The forecast is also updated daily on the LFUCG Air Quality web site, the EPA *AIRNOW* web site, the Government Channel 3 Cross Town Traffic television program and the WLEX Channel 18 television Weather web site.

When the air quality forecast level is approaching the level of unhealthy for sensitive groups an air quality advisory was issued. If the air quality is forecast to exceed the 8-hour air quality standard or .085 parts per million of Ozone concentration, an Ozone Action Day bulletin is issued. The Advisory and Action Day bulletins are issued to: television, radio and print media along with local, state and federal officials. Ozone Action Day bulletins are also distributed to employers. The advisories and Action Day bulletins promotes the voluntary efforts we can all take to help reduced air pollution.

Figure 6.1

|           | Air Quality (Pollution) Index     |  |  |  |  |
|-----------|-----------------------------------|--|--|--|--|
| 0 - 50    | Good                              |  |  |  |  |
| 51 - 78   | Moderate                          |  |  |  |  |
| 79 - 100  | Moderate w/ Advisory              |  |  |  |  |
| 101 - 150 | Unhealthy / Sensitive Groups      |  |  |  |  |
| Above 150 | Unhealthy                         |  |  |  |  |
| ]         | Forecast by: www.lfucg.com/Ozone/ |  |  |  |  |

#### **CHAPTER 6 - AIR QUALITY**

#### **Air Quality District History:**

The designated Metropolitan Planning Organization (MPO) for the Lexington urbanized area is the Lexington Area MPO. The census designated urbanized area encompasses most of Fayette County and portions of northern Jessamine County. In consideration of the close transportation interaction and rapid growth in both counties, the MPO Policy Committee voted on March 23, 1993 to expand the planning boundary to include all of Fayette and Jessamine Counties.

On November 15, 1990, Fayette and Scott Counties together were designated by the United States Environmental Protection Agency (USEPA) as a "non-attainment" air quality district for the pollutant ozone because of violations of National Ambient Air Quality Standards (NAAQS) in the period 1987-1989. Based on the severity of violations, the area was designated as "marginal" non-attainment.

The Kentucky Environmental and Public Protection Cabinet's Division for Air Quality (EPPC) submitted a redesignation request for the area due to consistent monitoring of attainment data. On November 13, 1995, the area was re-designated to "attainment" but required to maintain standards by showing conformity to the <u>State Implementation Plan</u> (SIP). In order to maintain the standard for ozone, precursors including the group of hydrocarbons (HC) known as volatile organic compounds (VOC), and oxides of nitrogen (NOx) must be controlled and <u>remain below emissions estimates from the SIP budget</u>. In accordance with the 1990 Clean Air Act Amendments, Lexington Area MPO transportation projects, programs, and plans cannot contribute to violations of these standards.

Comprehensive air quality conformity determination analysis was conducted before the approval of the <u>FY 2005-2008 Transportation Improvement Program</u> (TIP) and the Lexington Area MPO's <u>Year 2030 Transportation Plan</u>. The TIP and 2030 Transportation Plan include all regionally significant transportation projects and are "financially constrained"; meaning transportation improvement projects are limited by the amount of funds that can be expected to be received for the MPO Area. The SIP does not identify any specific transportation control measures for the Lexington Area MPO.

#### **Travel Demand and Emissions Modeling:**

The air quality conformity analysis involved two major elements: 1) The use of the Trans Cad travel demand forecasting/simulation model software to determine vehicle miles of travel (VMT) by road classification on the existing and proposed highway networks in the study area; and 2) the running of MOBILE 6.2 emissions factor model software to determine HC, and NOx emissions.

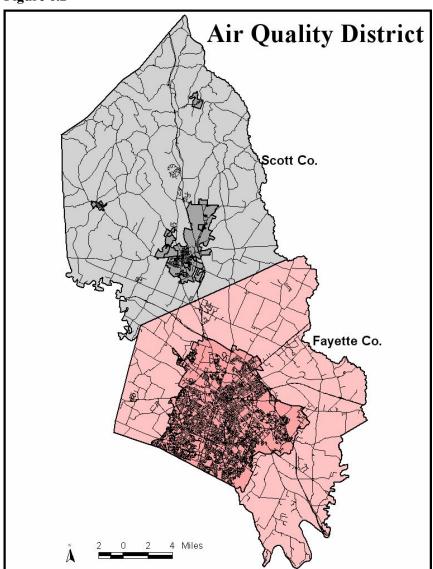
In Fayette County, the socio-economic model and the travel demand model were developed using the latest planning and land use assumptions. The development of socioeconomic data is covered in detail in Chapter-4 Plan Development. To adhere to federal regulations, socioeconomic data sets were developed for the 2030 Transportation Plan years, which include: 2004, 2010, 2015, 2020, and 2030.

Using TransCAD travel demand modeling software, transportation improvements/projects were added to transportation networks to create a set of "fiscally constrained" transportation scenarios for each required analysis year mentioned above. Analysis year scenarios were then modeled (again using TransCAD software) to obtain VMT by speed classes.

The timing of development is a balance between market and property owner/developer initiative, the ability of government to provide needed infrastructure to serve development, and the land that is available to be consumed with development (or re-development). The current socioeconomic data represents the best estimate and is based on the latest comprehensive planning and land use assumptions. The MPO will continue to monitor the rate of development of large growth areas and will adjust socioeconomic data accordingly to predict travel demand and emissions for the next transportation plan update. If necessary, more regulatory transportation control measures can be considered if development rates exceed current projections.

The following Figure 6.2 shows the Fayette/Scott Counties Air Quality District.

Figure 6.2



Since the United States Environmental Protection Agency (USEPA) has endorsed Highway Performance Monitoring System (HPMS) data, travel model VMT was compared to HPMS VMT for each functional road class and correction factors were developed and applied to reconcile the travel demand model with sanctioned HPMS data.

Scott County VMT was derived from the Kentucky Transportation Cabinet's TransCAD travel demand modeling process. HPMS corrected VMT output from this model was used with the Mobile 6.2 emissions model to determine the total emissions for Scott County. This output was combined with the Lexington MPO output to determine air quality conformity for the Fayette/Scott County Air Quality District.

# **Fayette and Scott County Projects for Air Quality Analysis**

The following list shows projects and analysis years for Fayette and Scott Counties. These projects were included in model analysis to determine air quality conformity. All regionally significant Scott County projects, including non-federally funded, have been included in the regional air quality analysis for this plan.

# FAYETTE COUNTY PROJECTS - AIR QUALITY ANALYSIS

| Year   | 2004  |  |
|--|---|--|
|  | & MPO #   | PROJECTS NON SLX FUNDED  |
|  | 038.33  | Richmond Rd. US-25/421 (New Circle to Man o' War Blvd.)  |
| 128.04   | 037.33  | Harrodsburg Rd. US-68 (4800' S. of Brandon Rd. to Man o' War)  |
|  | & MPO#  | PROJECTS SLX FUNDED  |
| 128.04   | 037.33  | Harrodsburg Rd. US-68 (4800' S. of Brandon Rd. to Man o' War) (KYTC # 128.04 has both SLX & Non SLX funding.)  |
| Year   | 2010  |  |
| KYTC   | & MPO#  | PROJECTS NON SLX FUNDED  |
| 318.00   | 037.33  | Harrodsburg Rd. US-68 (KY 29 to Brandon Rd.)   |
| 590.00   | 042.83  | <u>Liberty KY-1927/Todds Rd</u> Cadentown Bypass   |
|  | 043.82  | Newtown Pike Extension   |
|  | 043.22  | Newtown Pike Extension   |
|  | 046.22  | <u>Citation Blvd. – Phase II</u> (Southern RR to Leestown Rd.)   |
| 226.02   | 046.23  | Viley Road Extension- Phase II (Southern RR to Leestown Rd.)   |
| LVTC   | e MDO 4   | DDO IECTO CLV EUNDED   |
|  | <b>&amp; MPO</b> #  | PROJECTS SLX FUNDED Leestown Rd. (New Circle Rd. to Masterson Station Park)  |
|  | 008.13<br>014.13  | East Loudon Ave. (Oakhill Dr. to Winchester Rd.)   |
|  | 012.13  | Clays Mill Rd. (New Circle Rd. to Man o' War Blvd.)  |
|  | 010.13  | <u>Liberty/Todds Rd.</u> (0.2 miles South of Forrest Hill Dr. to I-75)   |
|  | 042.83-A  | Liberty KY 1927/Todds Rd. (Todds Rd. – Cadentown Bypass)   |
| 370.01   | 042.03-A  | Liberty KT 1727/Todds Rd. (Todds Rd. – Cadentown Bypass)   |
|  |   |  |
| Year   | 2015  |  |
|  | 2015<br>& MPO#  | PROJECTS NON SLX FUNDED  |
| KYTC   |   | PROJECTS NON SLX FUNDED  Harrodsburg Rd. US - 68 (New Circle Rd. to Man o' War Blvd.)  |
| <b>KYTC</b> 144.00   | & MPO #   | <u>Harrodsburg Rd. US - 68 (New Circle Rd. to Man o' War Blvd.)</u><br><u>Newtown Pike KY - 922 (New Circle Rd. to I - 75)</u>   |
| <b>KYTC</b><br>144.00<br>252.00<br>NA                            | <b>MPO</b> # 036.33 041.43 048.03   | <u>Harrodsburg Rd. US - 68 (New Circle Rd. to Man o' War Blvd.)</u><br><u>Newtown Pike KY - 922 (New Circle Rd. to I - 75)</u><br><u>Nicholasville Rd. US 27 (Southland Drive to New Circle Rd.)</u>   |
| <b>KYTC</b><br>144.00<br>252.00<br>NA<br>122.00                  | <b>% MPO #</b> 036.33 041.43 048.03 044.23  | Harrodsburg Rd. US - 68 (New Circle Rd. to Man o' War Blvd.)  Newtown Pike KY - 922 (New Circle Rd. to I - 75)  Nicholasville Rd. US 27 (Southland Drive to New Circle Rd.)  Georgetown Rd. US 25 (Spurr Rd. to Etter Ln.)   |
| <b>KYTC</b><br>144.00<br>252.00<br>NA                            | <b>MPO</b> # 036.33 041.43 048.03   | Harrodsburg Rd. US - 68 (New Circle Rd. to Man o' War Blvd.)  Newtown Pike KY - 922 (New Circle Rd. to I - 75)  Nicholasville Rd. US 27 (Southland Drive to New Circle Rd.)  Georgetown Rd. US 25 (Spurr Rd. to Etter Ln.)  Nicholasville Rd. US-27 (Man o' War Blvd. to Nicholasville Bypass)   |
| KYTC<br>144.00<br>252.00<br>NA<br>122.00<br>NA                   | 036.33<br>041.43<br>048.03<br>044.23<br>050.03  | Harrodsburg Rd. US - 68 (New Circle Rd. to Man o' War Blvd.)  Newtown Pike KY - 922 (New Circle Rd. to I - 75)  Nicholasville Rd. US 27 (Southland Drive to New Circle Rd.)  Georgetown Rd. US 25 (Spurr Rd. to Etter Ln.)  Nicholasville Rd. US-27 (Man o' War Blvd. to Nicholasville Bypass)  (Nich. Rd. US-27 Project is in both Fayette & Jessamine Counties.)   |
| <b>KYTC</b><br>144.00<br>252.00<br>NA<br>122.00                  | 036.33<br>041.43<br>048.03<br>044.23  | Harrodsburg Rd. US - 68 (New Circle Rd. to Man o' War Blvd.)  Newtown Pike KY - 922 (New Circle Rd. to I - 75)  Nicholasville Rd. US 27 (Southland Drive to New Circle Rd.)  Georgetown Rd. US 25 (Spurr Rd. to Etter Ln.)  Nicholasville Rd. US-27 (Man o' War Blvd. to Nicholasville Bypass)   |
| KYTC<br>144.00<br>252.00<br>NA<br>122.00<br>NA<br>NA             | 036.33<br>041.43<br>048.03<br>044.23<br>050.03  | Harrodsburg Rd. US - 68 (New Circle Rd. to Man o' War Blvd.) Newtown Pike KY - 922 (New Circle Rd. to I - 75) Nicholasville Rd. US 27 (Southland Drive to New Circle Rd.) Georgetown Rd. US 25 (Spurr Rd. to Etter Ln.) Nicholasville Rd. US-27 (Man o' War Blvd. to Nicholasville Bypass) (Nich. Rd. US-27 Project is in both Fayette & Jessamine Counties.) New Circle Rd. NE KY-4 (Georgetown Rd. to Richmond Rd. Signalized)   |
| KYTC<br>144.00<br>252.00<br>NA<br>122.00<br>NA<br>NA<br>NA       | 036.33<br>041.43<br>048.03<br>044.23<br>050.03<br>053.03<br>049.03  | Harrodsburg Rd. US - 68 (New Circle Rd. to Man o' War Blvd.)  Newtown Pike KY - 922 (New Circle Rd. to I - 75)  Nicholasville Rd. US 27 (Southland Drive to New Circle Rd.)  Georgetown Rd. US 25 (Spurr Rd. to Etter Ln.)  Nicholasville Rd. US-27 (Man o' War Blvd. to Nicholasville Bypass)  (Nich. Rd. US-27 Project is in both Fayette & Jessamine Counties.)  New Circle Rd. NE KY-4 (Georgetown Rd. to Richmond Rd. Signalized)  Nicholasville Rd. US - 27 (New Circle Rd. to Man o' War Blvd.)   |
| KYTC<br>144.00<br>252.00<br>NA<br>122.00<br>NA<br>NA<br>NA       | 036.33<br>041.43<br>048.03<br>044.23<br>050.03<br>053.03<br>049.03  | Harrodsburg Rd. US - 68 (New Circle Rd. to Man o' War Blvd.)  Newtown Pike KY - 922 (New Circle Rd. to I - 75)  Nicholasville Rd. US 27 (Southland Drive to New Circle Rd.)  Georgetown Rd. US 25 (Spurr Rd. to Etter Ln.)  Nicholasville Rd. US-27 (Man o' War Blvd. to Nicholasville Bypass)  (Nich. Rd. US-27 Project is in both Fayette & Jessamine Counties.)  New Circle Rd. NE KY-4 (Georgetown Rd. to Richmond Rd. Signalized)  Nicholasville Rd. US - 27 (New Circle Rd. to Man o' War Blvd.)  PROJECTS SLX FUNDED  |
| NA<br>NA<br>NA<br>NA<br>NA<br>KYTC<br>217.00<br>NA               | 036.33<br>041.43<br>048.03<br>044.23<br>050.03<br>053.03<br>049.03<br><b>&amp; MPO</b> #<br>005.12  | Harrodsburg Rd. US - 68 (New Circle Rd. to Man o' War Blvd.)  Newtown Pike KY - 922 (New Circle Rd. to I - 75)  Nicholasville Rd. US 27 (Southland Drive to New Circle Rd.)  Georgetown Rd. US 25 (Spurr Rd. to Etter Ln.)  Nicholasville Rd. US-27 (Man o' War Blvd. to Nicholasville Bypass)  (Nich. Rd. US-27 Project is in both Fayette & Jessamine Counties.)  New Circle Rd. NE KY-4 (Georgetown Rd. to Richmond Rd. Signalized)  Nicholasville Rd. US - 27 (New Circle Rd. to Man o' War Blvd.)  PROJECTS SLX FUNDED  Fayette Mall Rd. (Man O War Blvd. to West Reynolds Rd.)  Starshoot Parkway (Connection to Liberty Rd.)  Clays Mill Rd. (Harrodsburg Rd. to New Circle Rd.)  |
| NA<br>NA<br>NA<br>NA<br>NA<br>KYTC<br>217.00<br>NA               | 036.33<br>041.43<br>048.03<br>044.23<br>050.03<br>053.03<br>049.03<br><b>MPO</b> #<br>005.12<br>006.12  | Harrodsburg Rd. US - 68 (New Circle Rd. to Man o' War Blvd.)  Newtown Pike KY - 922 (New Circle Rd. to I - 75)  Nicholasville Rd. US 27 (Southland Drive to New Circle Rd.)  Georgetown Rd. US 25 (Spurr Rd. to Etter Ln.)  Nicholasville Rd. US-27 (Man o' War Blvd. to Nicholasville Bypass)  (Nich. Rd. US-27 Project is in both Fayette & Jessamine Counties.)  New Circle Rd. NE KY-4 (Georgetown Rd. to Richmond Rd. Signalized)  Nicholasville Rd. US - 27 (New Circle Rd. to Man o' War Blvd.)  PROJECTS SLX FUNDED  Fayette Mall Rd. (Man O War Blvd. to West Reynolds Rd.)  Starshoot Parkway (Connection to Liberty Rd.)  Clays Mill Rd. (Harrodsburg Rd. to New Circle Rd.)  Man o' War Blvd. (I-75 to Richmond Road)  |
| NA<br>NA<br>NA<br>NA<br>NA<br>NA<br>NA<br>217.00<br>NA<br>224.10 | 036.33<br>041.43<br>048.03<br>044.23<br>050.03<br>053.03<br>049.03<br><b>&amp; MPO</b> #<br>005.12<br>006.12<br>011.13  | Harrodsburg Rd. US - 68 (New Circle Rd. to Man o' War Blvd.)  Newtown Pike KY - 922 (New Circle Rd. to I - 75)  Nicholasville Rd. US 27 (Southland Drive to New Circle Rd.)  Georgetown Rd. US 25 (Spurr Rd. to Etter Ln.)  Nicholasville Rd. US-27 (Man o' War Blvd. to Nicholasville Bypass)  (Nich. Rd. US-27 Project is in both Fayette & Jessamine Counties.)  New Circle Rd. NE KY-4 (Georgetown Rd. to Richmond Rd. Signalized)  Nicholasville Rd. US - 27 (New Circle Rd. to Man o' War Blvd.)  PROJECTS SLX FUNDED  Fayette Mall Rd. (Man O War Blvd. to West Reynolds Rd.)  Starshoot Parkway (Connection to Liberty Rd.)  Clays Mill Rd. (Harrodsburg Rd. to New Circle Rd.)  |
| NA NA NA NA 224.10 NA Year                                       | 036.33<br>041.43<br>048.03<br>044.23<br>050.03<br>053.03<br>049.03<br><b>&amp; MPO</b> #<br>005.12<br>006.12<br>011.13<br>016.13<br>017.13  | Harrodsburg Rd. US - 68 (New Circle Rd. to Man o' War Blvd.)  Newtown Pike KY - 922 (New Circle Rd. to I - 75)  Nicholasville Rd. US 27 (Southland Drive to New Circle Rd.)  Georgetown Rd. US 25 (Spurr Rd. to Etter Ln.)  Nicholasville Rd. US-27 (Man o' War Blvd. to Nicholasville Bypass)  (Nich. Rd. US-27 Project is in both Fayette & Jessamine Counties.)  New Circle Rd. NE KY-4 (Georgetown Rd. to Richmond Rd. Signalized)  Nicholasville Rd. US - 27 (New Circle Rd. to Man o' War Blvd.)  PROJECTS SLX FUNDED  Fayette Mall Rd. (Man O War Blvd. to West Reynolds Rd.)  Starshoot Parkway (Connection to Liberty Rd.)  Clays Mill Rd. (Harrodsburg Rd. to New Circle Rd.)  Man o' War Blvd. (I-75 to Richmond Road)  |
| NA NA NA 224.10 NA NA NA Year KYTC                               | 036.33<br>041.43<br>048.03<br>044.23<br>050.03<br>053.03<br>049.03<br>& MPO #<br>005.12<br>006.12<br>011.13<br>016.13<br>017.13<br>2020<br>& MPO #  | Harrodsburg Rd. US - 68 (New Circle Rd. to Man o' War Blvd.)  Newtown Pike KY - 922 (New Circle Rd. to I - 75)  Nicholasville Rd. US 27 (Southland Drive to New Circle Rd.)  Georgetown Rd. US 25 (Spurr Rd. to Etter Ln.)  Nicholasville Rd. US-27 (Man o' War Blvd. to Nicholasville Bypass)  (Nich. Rd. US-27 Project is in both Fayette & Jessamine Counties.)  New Circle Rd. NE KY-4 (Georgetown Rd. to Richmond Rd. Signalized)  Nicholasville Rd. US - 27 (New Circle Rd. to Man o' War Blvd.)  PROJECTS SLX FUNDED  Fayette Mall Rd. (Man O War Blvd. to West Reynolds Rd.)  Starshoot Parkway (Connection to Liberty Rd.)  Clays Mill Rd. (Harrodsburg Rd. to New Circle Rd.)  Man o' War Blvd. (I-75 to Richmond Road)  Alumni Drive (Edgewater Dr. to Man o' War Blvd.)  |
| NA NA NA NA NA 224.10 NA Year KYTC NA                            | 036.33<br>041.43<br>048.03<br>044.23<br>050.03<br>053.03<br>049.03<br><b>&amp; MPO</b> #<br>005.12<br>006.12<br>011.13<br>016.13<br>017.13<br><b>2020</b><br><b>&amp; MPO</b> #<br>054.03               | Harrodsburg Rd. US - 68 (New Circle Rd. to Man o' War Blvd.)  Newtown Pike KY - 922 (New Circle Rd. to I - 75)  Nicholasville Rd. US 27 (Southland Drive to New Circle Rd.)  Georgetown Rd. US 25 (Spurr Rd. to Etter Ln.)  Nicholasville Rd. US-27 (Man o' War Blvd. to Nicholasville Bypass)  (Nich. Rd. US-27 Project is in both Fayette & Jessamine Counties.)  New Circle Rd. NE KY-4 (Georgetown Rd. to Richmond Rd. Signalized)  Nicholasville Rd. US - 27 (New Circle Rd. to Man o' War Blvd.)  PROJECTS SLX FUNDED  Fayette Mall Rd. (Man O War Blvd. to West Reynolds Rd.)  Starshoot Parkway (Connection to Liberty Rd.)  Clays Mill Rd. (Harrodsburg Rd. to New Circle Rd.)  Man o' War Blvd. (I-75 to Richmond Road)  Alumni Drive (Edgewater Dr. to Man o' War Blvd.)  PROJECTS NON SLX FUNDED  New Circle Rd. KY - 4 (Richmond Rd. to Nicholasville Rd)   |
| NA NA NA NA Year KYTC NA NA                                      | 036.33<br>041.43<br>048.03<br>044.23<br>050.03<br>053.03<br>049.03<br><b>&amp; MPO</b> #<br>005.12<br>006.12<br>011.13<br>016.13<br>017.13<br><b>2020</b><br><b>&amp; MPO</b> #<br>054.03<br>056.03     | Harrodsburg Rd. US - 68 (New Circle Rd. to Man o' War Blvd.)  Newtown Pike KY - 922 (New Circle Rd. to I - 75)  Nicholasville Rd. US 27 (Southland Drive to New Circle Rd.)  Georgetown Rd. US 25 (Spurr Rd. to Etter Ln.)  Nicholasville Rd. US-27 (Man o' War Blvd. to Nicholasville Bypass)  (Nich. Rd. US-27 Project is in both Fayette & Jessamine Counties.)  New Circle Rd. NE KY-4 (Georgetown Rd. to Richmond Rd. Signalized)  Nicholasville Rd. US - 27 (New Circle Rd. to Man o' War Blvd.)  PROJECTS SLX FUNDED  Fayette Mall Rd. (Man O War Blvd. to West Reynolds Rd.)  Starshoot Parkway (Connection to Liberty Rd.)  Clays Mill Rd. (Harrodsburg Rd. to New Circle Rd.)  Man o' War Blvd. (I-75 to Richmond Road)  Alumni Drive (Edgewater Dr. to Man o' War Blvd.)  PROJECTS NON SLX FUNDED  New Circle Rd. KY - 4 (Richmond Rd. to Nicholasville Rd)  Harrodsburg Rd. US - 68 (Mason Headley Rd. to New Circle Rd.)  |
| NA N                         | 036.33<br>041.43<br>048.03<br>044.23<br>050.03<br>053.03<br>049.03<br><b>MPO</b> #<br>005.12<br>006.12<br>011.13<br>016.13<br>017.13<br><b>2020</b><br><b>&amp; MPO</b> #<br>054.03<br>056.03<br>052.03 | Harrodsburg Rd. US - 68 (New Circle Rd. to Man o' War Blvd.)  Newtown Pike KY - 922 (New Circle Rd. to I - 75)  Nicholasville Rd. US 27 (Southland Drive to New Circle Rd.)  Georgetown Rd. US 25 (Spurr Rd. to Etter Ln.)  Nicholasville Rd. US-27 (Man o' War Blvd. to Nicholasville Bypass)  (Nich. Rd. US-27 Project is in both Fayette & Jessamine Counties.)  New Circle Rd. NE KY-4 (Georgetown Rd. to Richmond Rd. Signalized)  Nicholasville Rd. US - 27 (New Circle Rd. to Man o' War Blvd.)  PROJECTS SLX FUNDED  Fayette Mall Rd. (Man O War Blvd. to West Reynolds Rd.)  Starshoot Parkway (Connection to Liberty Rd.)  Clays Mill Rd. (Harrodsburg Rd. to New Circle Rd.)  Man o' War Blvd. (I-75 to Richmond Road)  Alumni Drive (Edgewater Dr. to Man o' War Blvd.)  PROJECTS NON SLX FUNDED  New Circle Rd. KY - 4 (Richmond Rd. to Nicholasville Rd)  Harrodsburg Rd. US - 68 (Mason Headley Rd. to New Circle Rd.)  Newtown Pike US 25/KY - 922 (Main Street to New Circle Rd.) |
| NA NA NA NA Year KYTC NA NA                                      | 036.33<br>041.43<br>048.03<br>044.23<br>050.03<br>053.03<br>049.03<br><b>&amp; MPO</b> #<br>005.12<br>006.12<br>011.13<br>016.13<br>017.13<br><b>2020</b><br><b>&amp; MPO</b> #<br>054.03<br>056.03     | Harrodsburg Rd. US - 68 (New Circle Rd. to Man o' War Blvd.)  Newtown Pike KY - 922 (New Circle Rd. to I - 75)  Nicholasville Rd. US 27 (Southland Drive to New Circle Rd.)  Georgetown Rd. US 25 (Spurr Rd. to Etter Ln.)  Nicholasville Rd. US-27 (Man o' War Blvd. to Nicholasville Bypass)  (Nich. Rd. US-27 Project is in both Fayette & Jessamine Counties.)  New Circle Rd. NE KY-4 (Georgetown Rd. to Richmond Rd. Signalized)  Nicholasville Rd. US - 27 (New Circle Rd. to Man o' War Blvd.)  PROJECTS SLX FUNDED  Fayette Mall Rd. (Man O War Blvd. to West Reynolds Rd.)  Starshoot Parkway (Connection to Liberty Rd.)  Clays Mill Rd. (Harrodsburg Rd. to New Circle Rd.)  Man o' War Blvd. (I-75 to Richmond Road)  Alumni Drive (Edgewater Dr. to Man o' War Blvd.)  PROJECTS NON SLX FUNDED  New Circle Rd. KY - 4 (Richmond Rd. to Nicholasville Rd)  Harrodsburg Rd. US - 68 (Mason Headley Rd. to New Circle Rd.)  |

#### **CHAPTER 6 - AIR QUALITY**

| KYTC | & MPO # | PROJECTS SLX FUNDED                                   |
|------|---------|---|
| NA   | 014.13  | Loudon Avenue (Russell Cave Rd. to Oakhill Dr.)       |
| NA   | 020.13  | Russell Cave Rd. (Park Place to North Broadway)       |
| NA   | 022.13  | Parkers Mill Rd. (Versailles Rd. to Man o' War Blvd.) |
| NA   | 023.13  | Todds Rd. (Codell Dr. to Man o' War Blvd.)            |
| NA   | 025.13  | Alumni Dr. (Nicholasville Rd. to Chinoe Rd.)          |
| NA   | 013.13  | <u>Liberty Road</u> (New Circle Rd. to Church of God) |
| NA   | 021.13  | Man o' War Blvd. (Richmond Rd. to Armstrong Mill Rd.) |

# **Year 2030**

| KYTC | & MPO # | PROJECTS NON SLX FUNDED  |
|------|---------|--|
| NA   | 051.03  | Winchester Rd. US – 60 (Midland Ave. to New Circle Rd.)                |
| NA   | 060.03  | Versailles Rd. US – 60 (New Circle Rd. to Red Mile Rd.)                |
| NA   | 062.03  | <u>KY – 29</u> (Southern Railroad to Harrodsburg Rd.)                  |
| NA   | 063.03  | Spur Rd. (Georgetown Rd. to Masterson Station Residential Area Access) |
|      | 0 MDO # | DD O IF CTC CL W FUNDED  |
| KYIC | & MPO # | PROJECTS SLX FUNDED  |
| NA   | 024.13  | Man o' War Blvd. (Armstrong Mill to Tates Creek Rd.)                   |
| NA   | 026.13  | Man o' War Blvd. (Tates Creek Rd. to Nicholasville Rd.)                |
| NA   | 028.13  | Man o' War Blvd. (I-75 to Winchester Rd.)                              |

# SCOTT COUNTY PROJECTS – AIR QUALITY ANALYSIS

# **Year 2004**

# KYTC # PROJECT

- 86.0 US-460 Reconstruct from Georgetown By-Pass to E of I-75 Interchange, 2002
- 1042.0 <u>CR-1218</u> Replace bridge and approaches on Galloway Rd over N. Elkhorn Creek 1.1mile. S. of KY-227, 2002
- 209.2 North Connector construct from US-25 to US-62 at Dagaris Mill, 2005
- 8001.0 Deceleration Lane on Quality Drive and By-Pass, 2002

#### **Year 2010**

#### KYTC# PROJECT

- 212.0 <u>US-460</u> Reconstruct from KY-227 at Great Crossing to US-62 W of Georgetown 2005
- 72.0 I-75 Lexington-Covington: From south of Pokeberry Rd to Grant Co. Line, 2006
- 1076.0 <u>KY-32</u> Replace Bridge and approaches at US-25 Sadieville (at Davis Branch of Straight Fork 3.0mi E. of US-25, 2006
- 1102.0 KY-356 Replace bridge and approaches at NS (CNO&TP) System 2.3 mi E of US-25, 2006
- 1105.0 CR-1020 Replace bridge and approaches at NS (CNO&TP) System 0.2 mi N of CR-5021, 2006
- 2011.0 I-75 Mill and Inlay from MP 126.8 to Wolf Branch Culvert (MP 133.8), 2006
- 8000.0 KY-227 Realign curve on KY-227 Viley Lane Intersection, 2003
- 122.0 US-25 Lexington-Georgetown; Georgetown Rd from I-75 to Etter Lane, 2004
- 123.0 <u>US-460</u> Reconstruct west of Georgetown to eliminate "S" curve 0.2 mile west of Cane Run Road
- 124.0 KY-32 Replace bridge over Lytle Creek at Josephine 1.4 mile west of Jct. KY-1636
- 125.0 <u>US-25</u> Replace bridge over North Rays Fork 0.6 mile south of the Grant-Scott County line
- 298.0 <u>US-62</u> from I-64 in Fayette Co. to Georgetown Bypass, 2003

# **Year 2015**

#### KYTC# PROJECT

- 102.0 Georgetown Northwest Bypass construct from US-460 W to I-75 N, 2006
- 209.2 North Connector construct from US-25 to US-62 at Dagaris Mill, 2005

The following text is a summary of a <u>Consultation</u> Meeting during which Air Quality Conformity issues for the *2030 Transportation Plan* update were discussed:

# **Lexington Area MPO Consultation Meeting Summaries**

#### **LAMPO's IAC Conference Call Minutes**

Thursday, April 10, 2003 9:00 a.m. EST LFUCG Building, Lexington, KY

# **Attendees:**

DAQ - Joe Forgacs
EPA, Region 4 - Lynorae Benjamin
FHWA, KY - Bernadette Dupont
KYTC (Multimodal) –Jesse Mayes, Charles Schaub
LAMPO – Max Conyers, Marc Guindon, Brian Rauf, Rob Hammons, David Schaars, Andrea Schoninger, Harika
Suklun

The meeting was set up to allow all the participating agencies to agree upon the inputs, time frames, and assumptions for the update of the Lexington Area MPO's Long Rang Transportation Plan. It was agreed upon that

- MOBILE 6.2 would be used for all conformity determinations.
- The following dates would be used.

Figure 6.3 - Conformity Timeline Table

| LRTP                            | CURRENT      | PROPOSED  |
|---------------------------------|--------------|---|
| Horizon                         | 2001-2025    | 2004-2030   |
| Plan Lapse<br>Date              | 9/27/2004    | 9/27/2007   |
| Emission<br>Budgets<br>Expire   | 11/13/2005   | 11/13/2015  |
| Base Year                       | 1990         | 2000  |
| Emission<br>Projection<br>Years | 2002<br>2004 | 2004<br>2005<br>2009<br>2012<br>2015                      |
| AQ Analysis<br>Years            |              | 2004<br>2010<br>2015 (outyear of budgets)<br>2020<br>2030 |

The following values will be used for the conformity process:

Figure 6.4 - Mobile 6 Inputs Table

| М               | OBILE 6.2 INPUTS | <b>DEFAULT</b> | USED |
|-----------------|------------------|----------------|------|
| TEMPERATUR<br>E | Minimum (°F)     | 72             | 67   |
| TEMPE<br>       | Maximum (°F)     | 92             | 95   |
|                 | Urban-Freeway    | 92             | 92.4 |
| VMT             | Urban-Ramp       | 8              | 7.6  |
| \$              | Rural – Freeway  | 98.5           | 98.5 |
|                 | Rural - Ramp     | 1.5            | 1.5  |

#### **MOBILE 6.2 Model**

- Input temperature should match Kentucky State Implementation Plan (SIP)
- The Division for Air Quality used a combination of Ozone monitoring data and information gathered from the weather website to determine which temperature should be used in the State Implementation Plan.
- There are two Ozone monitors in Lexington and one Ozone monitor in Scott County.

# Temperatures:

Mobile 5a: 68°F minimum temperature; 97° F maximum
 Mobile 6.2 defaults: 67°F minimum temperature; 95° F maximum
 Mobile 6.2: 68°F minimum temperature; 95° F maximum

# VMT percentage for ramps:

- Urban Default: 92% freeway; 8% ramps
- Rural Default: 98.5 freeway; 1.5 ramps
- KYTC conducted a statewide ramp study on and used this study as justification for using values other than the default values.

This concludes the summary of the Consultation meeting.

#### **CHAPTER 6 - AIR QUALITY**

The following information provides an additional explanation of the parameters and model assumptions used for the air quality conformity process.

# **Parameters and Model Assumptions**

Listed below are the parameters or model assumptions used for developing the Mobile 6.2 emission factors for the Lexington Area MPO's T.I.P and 2030 Plan air quality conformity determination. The minutes of the consultation meeting, listed above, detailed the Mobile 6.2 parameters or assumptions for the:

- Minimum and maximum temperatures
- VMT mix or percentages for facility type
- Sources of social economic data as an input to the TransCAD travel demand model for plan years VMTs determination.
- KYTC made the determination of whether speeds or functional class will be used as an input to the Mobile 6.2 model.

The following Mobile 6 defaults were used unless other wise indicated:

- 1. Absolute Humidity, Weathered RVP and Fuel Sulfur Content are Mobile 6 defaults.
- 2. For Nominal Fuel RVP a 8.6 psi was used instead of 8.7 psi based upon KY DAQ determination
- 3. Tier 2 emissions factors are a default in Mobile 6.2.
- 4. Vehicle types were the nine types from the Mobile 6.2 output.
- 5. Vehicle mix is the percentage of the total for each vehicle type this is taken from the Mobile 6.2 output and is different for each analysis year.
- 6. Mobile defaults of 12.9 mph were used for local streets.
- 7. Mobile defaults of 34.6 mph were used for ramps.
- 8. KYTC has supplied Ramp DVMT of 7.6% instead of mobile defaults of 8%.

# Air Quality Conformity Process for the Fayette County Projects

The following table shows the air quality emissions conformity for the Fayette/Scott County Air Quality District. The table shows the total State Implementation Plan (SIP) emissions budgets allowed for each of the analysis or plan years. The total emissions estimations from the Mobile 6.2 emissions factoring model for Fayette and Scott County is subtracted from the SIP emissions (pollution) budget to show the tons of emissions that each plan year is under the budget. The numbers in **BOLD** print are the total emissions in tons that each plan year is under the SIP emissions budget. By showing that each of the plan years is under the SIP budget means that Air Quality Conformity has been achieved for the Year 2030 Long Range Transportation Plan.

Figure 6.5 - Air Quality Conformity Summary Table

|  | (Emissions | s in Tons) |
|--|------------|------------|
| Plan Year 2004                               | НС         | NOX        |
| Fayette/Scott Co. Total SIP Emission Budget  | 18.14      | 27.36      |
| Fayette Co. Total Mobile 6 Emissions         | 14.41      | 20.12      |
| Scott Co. Total Mobile 6 Emissions           | 3.16       | 6.09       |
| Total Tons of Emissions under the SIP Budget | .57        | 1.15       |
|  | (Emissions | in Tons)   |
| Plan Year 2010                               | НС         | NOX        |
| Fayette/Scott Co. Total SIP Emission Budget  | 18.14      | 27.36      |
| Fayette Co. Total Mobile 6 Emissions         | 9.49       | 13.20      |
| Scott Co. Total Mobile 6 Emissions           | 2.32       | 4.23       |
| Total Tons of Emissions under the SIP Budget | 6.33       | 9.93       |
| Plan Year 2015                               | (Emissions | NOX        |
| Fayette/Scott Co. Total SIP Emission Budget  | 10.59      | 13.27      |
| Fayette Co. Total Mobile 6 Emissions         | 7.48       | 8.63       |
| Scott Co. Total Mobile 6 Emissions           | 1.88       | 2.70       |
| Total Tons of Emissions under the SIP Budget | 1.23       | 1.94       |
|  | (Emissions | in Tons)   |
| Plan Year 2020                               | НС         | NOX        |
| Fayette/Scott Co. Total SIP Emission Budget  | 10.59      | 13.27      |
| Fayette Co. Total Mobile 6 Emissions         | 6.29       | 6.24       |
| Scott Co. Total Mobile 6 Emissions           | 1.73       | 2.06       |
| Total Tons of Emissions under the SIP Budget | 2.57       | 4.97       |
| DI W 2020                                    | (Emissions | in Tons)   |
| Plan Year 2030                               | НС         | NOX        |
| Fayette/Scott Co. Total SIP Emission Budget  | 10.59      | 13.27      |
| Fayette Co. Total Mobile 6 Emissions         | 6.25       | 5.05       |
| Scott Co. Total Mobile 6 Emissions           | 2.10       | 1.72       |
|  | 2.24       | 6.50       |

# Air Quality Conformity for Fayette County and Scott County

The following tables include: 1.) The Mobile 6.2 emissions factors that are used with the HPMS corrected VMTs to determine the emission by road classification. 2.) The total Mobile 6.2 emissions results by plan years for hydrocarbons (HC) and oxides of nitrogen (NOx). 3.) The HPMS model speeds were used, by road classifications in order to be consistent with the SIP maintenance budget. 4.) The VMTs for the road classifications are based upon the projects listed on pages 124 – 125. 5.) The Trans CAD Travel Demand model allocated VMT's by the appropriate road classifications listed in the following emissions tables.

Figure 6.6 - Fayette/Scott Co. Total Emissions by Plan Years

| YEAR:                   |              | 2004          | Mobile Model U   | M6.2     | AF     | PLICABLE APP | ORTIONMENT F  | ACTOR NOT   | REFLECTED |  |               |              |         |
|-------------------------|--------------|---------------|------------------|----------|--------|--------------|---------------|-------------|-----------|--|---------------|--------------|---------|
| COUNTY:                 |              | Favette       |                  |          |        |              | ITY TOTALS AR |             |           |  | BILE6.2 Defau | It Contro    | ols     |
| SCENARIO:               | 1            | M6.2 Defaults |                  |          |        | (-55)        |               |             | ,         |  |               |              |         |
| ROAD CLASS              |              |               | DVMT w/ Ramp     | VOC EF   | CO EF  | NOx EF       | VOC tpd       | CO tpd      | NOx tpd   |  |               |              |         |
| R INTERST               |              |               | 0                | 0.000    | 0.000  | 0.000        | 0.00          | 0.00        | 0.00      |  |               | _            |         |
|                         |              |               | -                |          | 0.000  |              |               |             | 0.00      |  |               | $\mathbf{A}$ |         |
| R PRIN ART<br>R MIN ART |              |               | 0                | 0.000    | 0.000  | 0.000        | 0.00          | 0.00        | 0.00      |  |               |              |         |
|                         |              |               | 0                | 0.000    |        |              |               |             |           |  | 200           |              |         |
| R MAJ COLL              |              |               | 0                | 0.000    | 0.000  | 0.000        | 0.00          | 0.00        | 0.00      |  |               |              |         |
| R MIN COLL              |              |               | Ü                | 0.000    | 0.000  | 0.000        | 0.00          | 0.00        | 0.00      |  |               |              | -       |
| R LOCAL                 |              |               | 0                | 0.000    | 0.000  | 0.000        | 0.00          | 0.00        | 0.00      |  |               |              |         |
| U INTERST               |              | 49.0          | 1,918,836        | 1.320    | 16.60  | 2.370        | 2.79          | 35.11       | 5.01      |  |               |              |         |
| U FREEWAY               |              | 50.5          | 897,110          | 1.310    | 16.84  | 2.420        | 1.30          | 16.65       | 2.39      |  |               |              |         |
| U PRIN ART              |              | 28.0          | 1,801,853        | 1.550    | 14.23  | 2.040        | 3.08          | 28.27       | 4.05      | County   |               |              |         |
| U MIN ART               |              | 20.6          | 1,995,430        | 1.740    | 15.05  | 2.200        | 3.83          | 33.11       | 4.84      | Apport.  |               |              |         |
| U COLL                  |              | 21.0          | 753,701          | 1.730    | 14.97  | 2.190        | 1.44          | 12.44       | 1.82      | Factor   |               |              |         |
| U LOCAL                 |              | 12.9          | 700,847          | 2.230    | 14.56  | 2.150        | 1.72          | 11.25       | 1.66      |  | FAYI          | ETTE COU     | NTY     |
| RAMP                    |              | 34.6          | 144,952          | 1.570    | 20.13  | 2.130        | 0.25          | 3.22        | 0.34      |  | VOC tpd       | CO tpd       | NOx tpd |
|                         |              |               |                  |          |        |              |               |             |           | +  |               |              |         |
|                         |              | 217           | 8,212,729        |          |        |              | 14.41         | 140.05      | 20.12     | 100.0%   | 14.41         | 140.05       | 20.12   |
| YEAR:                   |              | 2004          | Mobile Model U   | 140.0    |        |              |               |             |           |  |               |              |         |
| COUNTY:                 |              | Scott         | Mobile Model U   | IVIO.2   | AF     | PLICABLE APP |               |             |           |  |               |              |         |
|                         |              |               |                  |          |        | (COUN        | ITY TOTALS AR | E LATER APP | ORTIONED) |  |               |              |         |
| SCENARIO:               | ľ            | M6.2 Defaults | D) (III          | \(0.0 EE | 00 FF  | NO 55        | 1/00/         | 00 / 1      | 110 ( )   |  |               |              |         |
| ROAD CLASS              | Speeds       | DVMT          | w/Ramp           | VOC EF   | CO EF  | NOx EF       | VOC tpd       | CO tpd      | NOx tpd   |  |               |              |         |
| R INTERST               | 60.3         | 1.343.980     | 1.323.820        | 1.256    | 17.929 | 2.802        | 1.83          | 26.17       | 4.09      |  |               |              |         |
| R PRIN ART              | 55           | 29.924        | 29,924           | 1.279    | 16.991 | 2.371        | 0.04          | 0.56        | 0.08      | County   |               |              |         |
| R MIN ART               | 53.4         | 90.740        | 90.740           | 1.288    | 16.663 | 2.324        | 0.13          | 1.67        | 0.23      | Apport.  |               |              |         |
| R MAJ COLL              | 50.3         | 158,118       | 158,118          | 1.309    | 16.202 | 2.225        | 0.10          | 2.82        | 0.39      | Factor   |               |              |         |
| R MIN COLL              | 54.6         | 74,377        | 74,377           | 1.281    | 16.828 | 2.359        | 0.11          | 1.38        | 0.19      |  | SCO           | OTT COUN     | TY      |
| R LOCAL                 | 38.6         | 70.916        | 70,916           | 2.234    | 14.560 | 2.155        | 0.17          | 1.14        | 0.17      |  | VOC tpd       | CO tpd       |         |
| UINTERST                | 0.00         | 70,510        | 70,510           | 1.262    | 18.739 | 2.987        | 0.00          | 0.00        | 0.00      | <del>                                     </del> | νου τρα       | οο τρα       | NOX tpu |
| U FREEWAY               | 0            | 0             | 0                | 10.875   | 44.974 | 3.845        | 0.00          | 0.00        | 0.00      | 100.0%   | 3.16          | 40.67        | 6.09    |
| U PRIN ART              | 48.6         | 162,795       | 162,795          | 1.321    | 15.976 | 2.187        | 0.24          | 2.87        | 0.39      | 100.070  | 3.10          | 40.07        | 0.00    |
| U MIN ART               | 39.8         | 130,821       | 130.821          | 1.392    | 14.799 | 2.034        | 0.24          | 2.07        | 0.39      |  |               |              |         |
| U COLL                  | 39.6<br>44.1 | 49.946        | 49,946           | 1.355    | 15.362 | 2.034        | 0.20          | 0.85        | 0.29      |  |               |              |         |
| U LOCAL                 | 34.1         | 39,350        | 49,946<br>39.350 | 2.234    | 15.362 | 2.095        | 0.07          | 0.85        | 0.12      |  |               |              |         |
| RAMP                    | 34.1         | ,             | ,                |          | 20.563 | 2.155        |               |             | 0.09      |  |               |              |         |
| KANIP                   |              | 0             | 20,160           | 1.579    | 20.563 | 2.131        | 0.04          | 0.46        | 0.05      |  | 1 = 1         | NOTON 1      | 254     |
|                         |              | 0.450.00=     | 0.450.007        |          |        |              | 0.40          | 40.6=       |           |  |               | NGTON A      |         |
|                         |              | 2,150,967     | 2,150,967        |          |        |              | 3.16          | 40.67       | 6.09      |  | VOC tpd       | CO tpd       | NOx tpd |
|                         |              |               |                  |          |        |              |               |             |           | TOTAL —  | 17.57         | 180.72       | 26.21   |
|                         |              |               |                  |          |        |              |               |             |           |  |               |              |         |

# **CHAPTER 6 – AIR QUALITY**

| YEAR: COUNTY: SCENARIO: ROAD CLASS  R INTERST R PRIN ART R MIN ART R MAJ COLL R MIN COLL R LOCAL U INTERST U FREEWAY U PRIN ART U MIN ART U MIN ART U COLL U LOCAL U LOCAL RAMP |              | Fayette<br>M6.2 Defaults | DVMT w/ Ra           |                               | VOC EF         | CO EF            | (C             |              | TIONMENT F   |                |              |       | MOBILE  | 6.2 Defau  | ult Contro | ols  |
|---|--------------|--------------------------|----------------------|-------------------------------|----------------|------------------|----------------|--------------|--------------|----------------|--------------|-------|---------|------------|------------|--|
| SCENARIO: ROAD CLASS R INTERST R PRIN ART R MIN ART R MAJ COLL R MIN COLL U INTERST U FREEWAY U PRIN ART U MIN ART U MIN ART U MIN ART U COLL U LOCAL                           |              | M6.2 Defaults            |                      | mp                            | VOC EF         | CO FE            |                | CONT         | I TOTALS AR  | L LATER AFT    | OKTIONED     |       | WIODILL | U.Z Delat  | in Contro  | )IS  |
| R INTERST R PRIN ART R MIN ART R MAJ COLL R MIN COLL R LOCAL U INTERST U FREEWAY U PRIN ART U MIN ART U COLL U LOCAL  |              | Speeds                   |                      | mp                            | VOC EF         | COLEE            |                |              |              |                |              |       |         |            |            |  |
| R PRIN ART R MIN ART R MAJ COLL R MIN COLL UINTERST U FREEWAY U PRIN ART U MIN ART U COLL U LOCAL   |              |                          |                      |                               |                | COEF             | NOx EF         |              | VOC tpd      | CO tpd         | NOx tpd      |       |         |            |            |  |
| R PRIN ART R MIN ART R MAJ COLL R MIN COLL UINTERST U FREEWAY U PRIN ART U MIN ART U COLL U LOCAL   |              |                          |                      | $\vdash$                      |                |                  |                |              |              |                |              |       |         |            |            | . –  |
| R MIN ART R MAJ COLL R MIN COLL R LOCAL U INTERST U FREEWAY U PRIN ART U MIN ART U COLL U LOCAL   |              |                          | 0                    | _                             | 0.000          | 0.000            | 0.000          |              | 0.00         | 0.00           | 0.00         |       |         | 01         | 4          |  |
| R MAJ COLL R MIN COLL R LOCAL U INTERST U FREEWAY U PRIN ART U MIN ART U COLL U LOCAL   |              |                          | 0                    |                               | 0.000          | 0.000            | 0.000          |              | 0.00         | 0.00           | 0.00         |       |         |            |            |  |
| R LOCAL U INTERST U FREEWAY U PRIN ART U MIN ART U COLL U LOCAL   |              |                          | 0                    |                               | 0.000          | 0.000            | 0.000          |              | 0.00         | 0.00           | 0.00         |       |         | U          |            |  |
| U INTERST<br>U FREEWAY<br>U PRIN ART<br>U MIN ART<br>U COLL<br>U LOCAL  |              |                          | 0                    |                               | 0.000          | 0.000            | 0.000          |              | 0.00         | 0.00           | 0.00         |       |         |            |            |  |
| U FREEWAY<br>U PRIN ART<br>U MIN ART<br>U COLL<br>U LOCAL   |              |                          | 0                    | $\vdash$                      | 0.000          | 0.000            | 0.000          |              | 0.00         | 0.00           | 0.00         |       |         |            |            |  |
| U PRIN ART<br>U MIN ART<br>U COLL<br>U LOCAL  |              | 49.0<br>50.5             | 2,258,086<br>978,153 | $\vdash$                      | 0.776          | 10.385<br>10.531 | 1.340<br>1.370 |              | 1.93<br>0.83 | 25.85<br>11.36 | 3.34<br>1.48 |       |         |            |            |  |
| U MIN ART<br>U COLL<br>U LOCAL  |              | 28.0                     | 1,958,982            |                               | 0.770          | 9.070            | 1.190          |              | 1.94         | 19.59          | 2.57         | Coun  | tv      |            |            |  |
| U LOCAL   |              | 20.6                     | 2,327,609            |                               | 1.010          | 9.681            | 1.280          |              | 2.59         | 24.84          | 3.28         | Appo  | ,       |            |            |  |
|   |              | 21.0                     | 874,522              |                               | 1.000          | 9.630            | 1.270          |              | 0.96         | 9.28           | 1.22         | Fact  |         |            |            |  |
| RAMP  |              | 12.9                     | 842,194              |                               | 1.170          | 9.835            | 1.289          |              | 1.09         | 9.13           | 1.20         |       | FAY     | ETTE COU   |            |  |
|   |              | 34.6                     | 159,959              | $\vdash$                      | 0.808          | 11.893           | 0.634          |              | 0.14         | 2.10           | 0.11         |       |         | VOC tpd    | CO tpd     | NOx tpd  |
|   |              |                          | 9,399,505            | $\vdash$                      |                |                  |                |              | 9.49         | 102.16         | 13.20        | 100.0 | 0/_     | 9.49       | 102.16     | 13.20  |
|   |              |                          | 9,399,303            | $\vdash$                      |                |                  |                |              | 3.43         | 102.10         | 13.20        | 100.0 | /0      | 3.43       | 102.10     | 13.20  |
| YEAR:   |              | 2010                     | Mobile Mode          | el UM                         | 6.2            | Al               | PPLICABLE A    | APPOR        | RTIONMENT F  | ACTOR NOT      | REFLECTED    |       |         |            |            |  |
| COUNTY:   |              | Scott                    |                      |                               |                |                  |                |              | Y TOTALS AR  |                |              |       |         |            |            |  |
| SCENARIO:   |              | M6.2 Defaults            |                      |                               |                |                  |                |              |              |                |              |       |         |            |            |  |
| ROAD CLASS  |              | DVMT                     | DVMT                 | $\Box$                        | VOC EF         | CO EF            | NOx EF         |              | VOC tpd      | CO tpd         | NOx tpd      |       |         |            |            |  |
| D INTEROT   | Speeds       | 1 550 540                | w/Ramp               | $\vdash$                      | 0.740          | 44.400           | 4 550          |              | 4.05         | 40.77          | 0.00         |       |         | 1          |            |  |
| R INTERST<br>R PRIN ART   | 59.1<br>55   | 1,553,548<br>33,435      | 1,530,245<br>33,435  | $\vdash \vdash$               | 0.742<br>0.751 | 11.126<br>10.630 | 1.552<br>1.378 |              | 1.25<br>0.03 | 18.77<br>0.39  | 2.62<br>0.05 | Coun  | tv      |            |            |  |
| R MIN ART   | 52.6         | 113,130                  | 113,130              | $\vdash$                      | 0.760          | 10.630           | 1.376          | 1 1          | 0.03         | 1.30           | 0.05         | Appo  |         |            |            |  |
| R MAJ COLL  | 50.4         | 216,961                  | 216,961              |                               | 0.767          | 10.248           | 1.299          |              | 0.18         | 2.45           | 0.31         | Facto |         |            |            |  |
| R MIN COLL  | 54.6         | 107,711                  | 107,711              |                               | 0.753          | 10.597           | 1.371          |              | 0.09         | 1.26           | 0.16         | 1     | SC      | OTT COUN   | ΙΤΥ        |  |
| R LOCAL   | 38.6         | 88,381                   | 88,381               | L                             | 1.278          | 9.835            | 1.289          |              | 0.12         | 0.96           | 0.13         |       |         | VOC tpd    | CO tpd     | NOx tpd  |
| U INTERST   | 0            | 0                        | 0                    |                               | 0.746          | 11.481           | 1.633          |              | 0.00         | 0.00           | 0.00         | *     |         |            |            |  |
| U FREEWAY   | 0            | 0                        |                      | $\vdash$                      | 6.041          | 28.883           | 2.209          |              | 0.00         | 0.00           | 0.00         | 100.0 | %       | 2.32       | 31.50      | 4.23   |
| U PRIN ART<br>U MIN ART   | 46.8<br>38.2 | 248,035<br>153,878       | 248,035<br>153,878   | $\vdash$                      | 0.782<br>0.822 | 9.934<br>9.255   | 1.249<br>1.177 |              | 0.21<br>0.14 | 2.72<br>1.57   | 0.34<br>0.20 |       |         |            |            |  |
| U COLL  | 43.2         | 112,951                  | 112,951              |                               | 0.798          | 9.642            | 1.211          |              | 0.14         | 1.20           | 0.20         |       |         |            |            |  |
| U LOCAL   | 33.5         | 52,696                   | 52,696               |                               | 1.278          | 9.835            | 1.289          |              | 0.07         | 0.57           | 0.07         |       |         |            |            |  |
| RAMP  |              | 0                        | 23,303               |                               | 0.896          | 11.893           | 1.232          |              | 0.02         | 0.31           | 0.03         |       |         |            |            |  |
|   |              |                          |                      |                               |                |                  |                |              |              |                |              |       | LE)     | INGTON A   |            |  |
|   |              | 2,680,727                | 2,680,727            | Ш                             |                |                  |                |              | 2.32         | 31.50          | 4.23         |       |         | VOC tpd    | CO tpd     | NOx tpd  |
|   |              |                          |                      | $\vdash$                      |                |                  |                |              |              |                |              |       |         |            |            |  |
| V=45  |              |                          |                      | <del>   -</del>               |                |                  |                |              |              |                |              | TOTAL |         | 11.81      | 133.66     | 17.43  |
| YEAR:<br>COUNTY:  |              | 2015<br>Fayette          | Mobile Mode          | el UMI                        | 6.2            | A                |                |              | TIONMENT F   |                |              |       | MODILE  | E6.2 Defau | ult Contro |  |
| SCENARIO:   |              | M6.2 Defaults            |                      |                               |                |                  | (0             | UUNI         | 1 IUIALS AR  | E LATER APP    | PORTIONED)   |       | WIODILE | LO.Z Delai | iii Contro | ,15<br>  |
| ROAD CLASS  |              |                          | DVMT w/ Ra           | mp                            | VOC EF         | CO EF            | NOx EF         | H            | VOC tpd      | CO tpd         | NOx tpd      |       |         |            |            |  |
|   |              |                          |                      |                               |                |                  |                |              |              | •              |              |       | _       | _          | _          |  |
| R INTERST   |              |                          | 0                    |                               | 0.000          | 0.000            | 0.000          |              | 0.00         | 0.00           | 0.00         |       |         | 01         | 4 F        | ■  |
| R PRIN ART<br>R MIN ART   |              |                          | 0                    |                               | 0.000          | 0.000            | 0.000          |              | 0.00         | 0.00           | 0.00         |       |         |            |            |  |
| R MAJ COLL  |              |                          | 0                    |                               | 0.000          | 0.000            | 0.000          |              | 0.00         | 0.00           | 0.00         |       |         | U          |            |  |
| R MIN COLL  |              |                          | 0                    |                               | 0.000          | 0.000            | 0.000          |              | 0.00         | 0.00           | 0.00         |       |         |            |            |  |
| R LOCAL   |              |                          | 0                    |                               | 0.000          | 0.000            | 0.000          |              | 0.00         | 0.00           | 0.00         |       |         |            |            |  |
| U INTERST   |              | 49.0                     | 2,520,568            |                               | 0.540          | 8.547            | 0.780          |              | 1.50         | 23.75          | 2.17         |       |         |            |            |  |
| U FREEWAY   |              | 50.5                     | 1,002,753            | $\vdash$                      | 0.540          | 8.665            | 0.790          |              | 0.60         | 9.58           | 0.87         | 0     |         |            |            |  |
| U PRIN ART<br>U MIN ART   |              | 28.0<br>20.6             |                      |                               | 0.630          | 7.535<br>8.076   | 0.700<br>0.750 |              | 1.50<br>1.98 | 17.92<br>22.84 | 1.66<br>2.12 | Coun  | •       |            |            |  |
| U COLL  |              | 21.0                     | 965,567              |                               | 0.700          | 8.023            | 0.750          |              | 0.75         | 8.54           | 0.80         | Fact  |         |            |            |  |
| U LOCAL   |              | 12.9                     |                      |                               | 0.900          | 8.429            | 0.752          |              | 1.04         | 9.71           | 0.87         | 1     |         | ETTE COU   | NTY        |  |
| RAMP  |              | 34.6                     |                      | 厂                             | 0.623          | 9.542            | 0.732          |              | 0.12         | 1.85           | 0.14         |       |         | VOC tpd    |            | NOx tpd  |
|   |              |                          | 40 :22 -             | H                             |                |                  |                | ш            |              |                |              |       | 0/      |            |            |  |
|   |              |                          | 10,432,227           | $\vdash$                      | +              |                  |                | ┝            | 7.48         | 94.20          | 8.63         | 100.0 | 70      | 7.48       | 94.20      | 8.63   |
| YEAR:   |              | 2015                     | Mobile Mode          | el LIM                        | 6.2            | Λ.               | PPI ICARI E /  | APPOP        | RTIONMENT F  | ACTOR NOT      | REELECTED    |       |         |            |            |  |
| COUNTY:   |              | Scott                    |                      | 9171                          |                | A                |                |              | Y TOTALS AR  |                |              |       |         |            |            |  |
| SCENARIO:   |              | M6.2 Defaults            |                      |                               |                |                  | ,              |              |              |                |              |       |         |            |            |  |
| ROAD CLASS  |              | DVMT                     | DVMT w/ Ra           | mp                            | VOC EF         | CO EF            | NOx EF         |              | VOC tpd      | CO tpd         | NOx tpd      |       |         |            |            |  |
| D 11177777  | Speeds       | 1.000.70                 | 40:0:5:              | $oldsymbol{oldsymbol{\perp}}$ | 0 =01          |                  |                |              |              |                |              |       |         | 1          |            | <b></b>  |
| R INTERST   | 57.5         | 1,668,508                | 1,643,481            | $\vdash$                      | 0.529          | 9.037            | 0.862<br>0.796 | H            | 0.96         | 16.37          | 1.56<br>0.08 | C     | f1/     |            |            | -  |
| R PRIN ART<br>R MIN ART   | 54.9<br>51.8 | 89,557<br>127,074        | 89,557<br>127,074    | $\vdash \vdash$               | 0.532          | 8.756<br>8.544   | 0.796<br>0.768 | <del> </del> | 0.05         | 0.86<br>1.20   | 0.08         | Coun  |         |            |            |  |
| R MAJ COLL  | 49.7         | 257,031                  | 257,031              | $\vdash \vdash$               | 0.544          | 8.390            | 0.749          |              | 0.00         | 2.38           | 0.11         | Fact  |         |            |            |  |
| R MIN COLL  | 54.5         | 142,332                  | 142,332              | $\sqcap$                      | 0.533          | 8.730            | 0.792          | П            | 0.08         | 1.37           | 0.12         | 1     |         | OTT COUN   | ITY        |  |
| R LOCAL   | 38.5         | 100,640                  | 100,640              | 口                             | 0.900          | 8.429            | 0.752          |              | 0.10         | 0.94           | 0.08         |       |         | VOC tpd    |            | NOx tpd  |
| U INTERST   | 0            | 0                        | 0                    |                               | 0.532          | 9.279            | 0.889          |              | 0.00         | 0.00           | 0.00         | +     |         |            |            |  |
| U FREEWAY   | 0            | 0                        | Ü                    | $oldsymbol{\perp}$            | 4.007          | 23.822           | 1.297          | ш            | 0.00         | 0.00           | 0.00         | 100.0 | %       | 1.88       | 29.03      | 2.70   |
| U PRIN ART  | 42.7         | 278,537                  | 278,537              | $\vdash \vdash$               | 0.563          | 7.935            | 0.710          | H            | 0.17         | 2.44           | 0.22         |       |         |            |            | <del>                                     </del> |
| U MIN ART<br>U COLL   | 36.5<br>39.4 | 173,863<br>140,229       | 173,863<br>140,229   | +                             | 0.584<br>0.574 | 7.552<br>7.722   | 0.690<br>0.696 | H            | 0.11         | 1.45<br>1.19   | 0.13<br>0.11 |       |         |            |            |  |
| U LOCAL   | 39.4         | 61,133                   | 61,133               |                               | 0.900          | 8.429            | 0.696          | H            | 0.09         | 0.57           | 0.11         |       |         |            |            |  |
| RAMP  | 33           | 0 0                      | 25,028               |                               | 0.623          | 9.542            | 0.732          |              | 0.02         | 0.26           | 0.02         |       |         |            |            |  |
|   |              |                          |                      |                               |                |                  |                |              |              |                |              |       | LEX     | XINGTON A  |            |  |
|   |              | 3,038,906                | 3,038,906            | П                             |                |                  |                |              | 1.88         | 29.03          | 2.70         |       |         | VOC tpd    | CO tpd     | NOx tpd  |
|   | 1            |                          |                      |                               |                |                  |                | LΤ           |              |                |              |       | 1       | 1          |            |  |
|   |              |                          |                      | . —                           | 1              |                  |                | 1            | - 1          |                | l.           | TA    |         |            | 400 00     |  |
|   |              |                          |                      | Щ                             |                |                  |                |              |              |                |              | TOTAL |         | 9.36       | 123.23     | 11.33  |

# **CHAPTER 6 – AIR QUALITY**

| COUNTY:   Specific   COUNTY:   To pricing   COUNTY:   TO NO. 2 PART   VOC EF   CO EF   NO. EF   VOC tyd   CO tyd   No. tyd   | VEAD  | 1  |   |  |          | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,   |   |  |               |   |  |  |                      |  |   |  |                                  |
|--|---|--|---|--|----------|---|---|--|---------------|---|--|--|----------------------|--|---|--|----------------------------------|
| SCENARO: No. 2 Speeds (WHT without State of the Courty Court of th | YEAR:   |  |   | Mobile Mode  | el UN    | M6.2  | AF  |  |               |   |  |  |                      | MOE  | RII E6 2 Dofo                           | ult Contr  |                                  |
| ROAD CLASS    Speeds   Cyte   Cot   F   Cot   Cyte   Cot   Cyte   Cot   Cyte   Cot   Cyte   Cot   Cyte   Cot   Cyte   Cyte   Cot   Cyte   Cyte |   | 1  |   |  | +        |   |   | (60  | JUNI Y        | IOTALS ARI  | LAIEK API  | - OKTIONED)  |                      | IVIOE  | DILEO.Z Defa                            | uit Contre   | 015                              |
| R FRINA RAT   0   0.00 | ROAD CLASS  |  |   | DVMT w/ Ra   | mp       | VOC EF  | CO EF   | NOx EF   |               | VOC tpd   | CO tpd   | NOx tpd  | r                    |  |   |  | Ь,                               |
| R FRINA ART   0 0.000 0. |   |  |   |  |          |   |   |  |               |   |  |  |                      | _  |   |  | . =                              |
| R MIN COLL    0  |   |  |   |  | +        |   |   |  | +             |   |  |  | $\vdash\vdash\vdash$ |  | יחנ                                     |  | <b>&gt;</b> ⊢                    |
| R MIN COLL    0  |   |  |   |  | -        |   |   |  | -             |   |  |  |                      | 4  | / [ ]                                   |  |                                  |
| R LOCAL    1   | R MAJ COLL  |  |   | 0  |          | 0.000   |   |  |               | 0.00  |  | 0.00   |                      |  |   | $\Delta \mathbf{t}$  | J $lacksquare$                   |
| UNITED   4.00   2.62.009   0.427   7.700   0.517   1.33   23.60   1.61   1.51   1.52   |   |  |   |  | _        |   |   |  | _             |   |  |  |                      |  |   |  |                                  |
| U PREEMAY    0.55   0.06.998   0.421   7.712   0.536   0.49   0.06   0.02  |   |  | 40.0  |  | $\dashv$ |   |   |  |               |   |  |  |                      |  |   |  |                                  |
| U PRIN ART   28.0   2.200.001   0.469   6.732   0.476   1.21   16.46   1.17   County   VOICE   VOICE   1.10   VOICE   C.011   VOICE   C.011   VOICE   C.012    |   |  |   |  | H        |   |   |  | -             |   |  |  |                      |  |   |  |                                  |
| U COLL    1219   1181778   0.548   2.187   0.516   0.618   2.44   0.57   Festor  |   |  |   |  |          |   |   |  |               |   |  |  | Cou                  | nty  |   |  |                                  |
| ULOCAL    12.9   1.119.70   0.718   7.634   0.597   0.58   9.42   0.63   |   |  |   |  | Ш        |   |   |  | _             |   |  |  |                      |  |   |  |                                  |
| RAMP    346   198.58   0.494   8.494   0.511   0.10   1.75   0.11   0.10   0.75   0.11   0.00 |   |  |   |  | +        |   |   |  | $-\mathbf{k}$ |   |  |  | Fac                  | tor  | EAN                                     | ETTE COL   | INITY                            |
| VEAR   2020   Mobile Model U M6.2   APPLICABLE APPORTOWNENT FACTOR NOT REFLECTED   |   |  |   |  | +        |   |   |  | -             |   |  |  |                      |  |   |  |                                  |
| VEAR:  |   |  | 0 1.10  | 100,000  |          | 0.101   | 0.101   | 0.011  | - t           | 0.10  | 0  | 0.11   | ,                    | ,  | 100 400                                 | 70.50  |                                  |
| COUNTY:  |   |  |   | 11,152,859   |          |   |   |  |               | 6.29  | 84.58  | 6.24   | 100                  | 0%   | 6.29                                    | 84.58  | 6.2                              |
| COUNTY:  | VEAD.   |  | 0000  | Mahila Mada  |          | MC 2  |   | DI 10 4 DI E 41  |               | IONIAENIT E   | ACTOR NOT  | DEEL FOTER   |                      |  |   |  |                                  |
| SCENARIO: M62 Defaults Speede R NTERST  |   |  |   | Mobile Mode  | ei Ui    | VIO.2   | Al  |  |               |   |  |  |                      |  |   |  |                                  |
| RITERST   Speeds   S  |   | 1  |   |  |          |   |   | 90)  |               | TOTALO AIG  | LAILKAII   | OKTIONED)  |                      |  |   |  |                                  |
| R NTERST 56 1,340,349 1,313,334 0,411 7,929 0,551 0,82 15.65 1,10 County R NIM ART 50.9 147,990 147,990 1,419,900 0,418 7,546 0,509 0,07 1,22 0,08 1,40 0,10 County R NIM ART 50.9 147,990 147,990 1,419,900 0,418 7,546 0,509 0,07 1,22 0,000 1,10 County R NIM ART 50.9 147,990 147,990 1,419,900 0,418 7,546 0,509 0,07 1,22 0,000 1,10 County R NIM COLL 54.2 194,265 194,265 0,412 7,735 0,529 0,000 1,56 0,00 1,10 County R NIM COLL 54.3 194,265 194,265 0,412 7,735 0,529 0,000 1,56 0,01 1,40 0,00 0,00 0,00 0,00 0,00 0,00   | ROAD CLASS  |  | DVMT  | DVMT w/ Ra   | mp       | VOC EF  | CO EF   | NOx EF   |               | VOC tpd   | CO tpd   | NOx tpd  |                      |  |   |  |                                  |
| R PRIM ART 54.8 173,741 173,741 0.412 7.787 0.529 0.08 1.46 0.010 County R MAI COLL 49.9 371,137 317,137 0.422 7.425 0.500 0.07 1.22 0.08 Apport.  R MAI COLL 49.9 371,137 317,137 0.422 7.425 0.500 0.15 2.60 0.17 Factor R MAI COLL 49.9 317,137 317,137 0.422 7.425 0.500 0.15 2.60 0.17 Factor R MAI COLL 49.9 317,137 317,137 0.422 7.425 0.500 0.15 2.60 0.09 1.00 0.00 0.00 0.00 0.00 0.00 0.0  | DINTERSE  |  | 4.040.045   | 4.040.00:  | $\perp$  | 0.111   | 7.000   | 0.554  | $-\Gamma$     | 0.00  | 45.05  |  |                      |  |   |  |                                  |
| R MIM ART  |   |  |   |  | +        |   |   |  | -             |   |  |  | Cou                  | ntv  |   |  |                                  |
| R MAJ COLL  ## ANN ANN  ## ANN COLL  ## ANN ANN  ## ANN COLL  ## ANN ANN  ## ANN ANN  ## ANN COLL  ## ANN ANN  ## ANN  ## ANN ANN  |   |  | -,  |  | +        |   |   |  | $\dashv$      |   |  |  |                      | -  |   |  |                                  |
| RICOCAL 38.5 119,028 119,028 0.718 7.634 0.597 0.09 1.00 0.07  | R MAJ COLL  | 48.9   | 317,137   | 317,137  | 丁        | 0.422   | 7.425   | 0.500  |               | 0.15  | 2.60   | 0.17   |                      |  |   |  |                                  |
| UNITERST 0 0 0 0 0 0.413 8.133 0.666 0.00 0.00 0.00 0.00   |   |  |   |  | 1        |   |   |  |               |   |  |  |                      |  |   |  |                                  |
| UPRIEWAY  UPRINART  38.7 324.290 324.290  UPRINART  38.7 324.290 324.290  UPRINART  38.7 324.290  UPRINART  48.80  UPRINART  0 203.840  0 27.514  0 4844  0.4844  0.5071  0 27.614  0 27.  |   | 38.5   | 119,028   |  | $\dashv$ |   |   |  |               |   |  |  |                      | <u>.                                    </u> | VOC tpd                                 | CO tpd   | NOx tpo                          |
| UPRIN ART 38.7 324.290 324.290 0.446 6.846 0.470 0.16 2.45 0.17 UDIN ART 34.7 203.340 203.840 0.459 6.845 0.466 0.10 1.49 0.10 UCOLL 35.7 181,146 181,146 0.459 0.455 6.886 0.466 0.09 1.34 0.09 U.COLL 35.7 181,146 181,146 0.459 0.718 7.634 0.597 0.06 0.62 0.04 U.COLL 35.7 181,146 181,146 0.459 0.718 0.718 0.759 0.06 0.62 0.04 U.COLL 35.6 1.758 0.758 0.718 0.758 0.718 0.759 0.06 0.62 0.04 U.COLL 35.6 1.758 0.758 0.718 0.759 0.759 0.06 0.62 0.04 U.COLL 35.6 1.758 0.758 0.758 0.758 0.758 0.759 0.759 0.06 0.62 0.04 U.COLL 35.6 1.759 0.758  |   | 0  | 0   |  | -        |   |   |  |               |   |  |  | 100                  | 0%   | 1 73                                    | 29 99  | 2.06                             |
| UCOLL 33.7 181,146 181,146 0.455 6.886 0.466 0.09 1.34 0.09 ULOCAL 32.6 73,788 73,788 0.718 0.77634 0.507 0.06 0.62 0.04   |   |  | -   |  | T        |   |   |  | <u> </u>      |   |  |  |                      | 0 70   | 1.70                                    | 20.00  | 2.00                             |
| ULOCAL   32 6   73,788   73    |   | 34.7   | 203,840   | 203,840  |          | 0.459   | 6.645   | 0.466  |               | 0.10  | 1.49   | 0.10   |                      |  |   |  |                                  |
| RAMP   0   27.614   0.484   8.484   0.511   0.01   0.26   0.02     LEXINGTON A   1.73   29.99   2.06   VOC tpd   CO t    |   |  |   |  |          |   |   |  | _             |   |  |  |                      |  |   |  |                                  |
| Second Color   Sec    |   | 32.6   | 73,788  |  |          |   |   |  |               |   |  |  |                      |  |   |  |                                  |
| YEAR:  | TV-WII  |  |   | 27,014   | $\dashv$ | 0.404   | 0.404   | 0.511  | -             | 0.01  | 0.20   | 0.02   |                      |  | LEX                                     | KINGTON A  | REA                              |
| VEAR:  |   |  | 3,576,174   | 3,576,174  |          |   |   |  |               | 1.73  | 29.99  | 2.06   |                      |  |   |  |                                  |
| VEAR:  |   |  |   |  |          |   |   |  |               |   |  |  |                      |  |   |  |                                  |
| COUNTY:   Fayette   COUNTY TOTALS ARE LATER APPORTIONED    MOBILE 6.2 Default Control  |   |  |   |  |          |   |   |  |               |   |  |  | TOTA                 | L —  | → 8.02                                  | 114.57   | 8.30                             |
| SCENARIO:   M6.2 Defaults  |   |  |   | Mobile Mode  | el UN    | M6.2  | AF  |  |               |   |  |  |                      |  | U 50 0 D . f -                          |  |                                  |
| ROAD CLASS   Speeds   DVMT w/ Ramp   VOC EF   CO EF   NOX EF   VOC tpd   CO tpd   NOX tpd  |   |  |   |  | +        |   |   | (60  | JUNIY         | TOTALS ARI  | E LATER API  | PORTIONED)   |                      | WICE   | SILE6.2 Deta                            | uit Contro   | ois                              |
| R PRIN ART   |   |  |   | DVMT w/ Ra   | mp       | VOC EF  | CO EF   | NOx EF   | <b>-</b>      | VOC tpd   | CO tpd   | NOx tpd  | ,                    |  |   |  |                                  |
| R PRIN ART   |   |  |   |  |          |   |   |  |               |   |  |  |                      | _  |   |  |                                  |
| R MIN COLL   |   |  |   | 0  | _        |   |   |  | $-\mathbf{k}$ |   |  |  |                      |  |   |  | •                                |
| R MIN COLL   |   |  |   | 0  |          |   |   |  |               |   | 0.00   | 0.00   |                      |  |   |  |                                  |
| R LOCAL  |   |  |   |  | -        |   |   |  |               |   | 0.00   | 0.00   |                      |  |   | 71   |                                  |
| U FREEWAY 50.5 1,113,032 0.35 7.139 0.347 1.32 27.01 1.31   U FREEWAY 50.5 1,113,032 0.35 7.237 0.352 0.42 8.88 0.43   U PRIN ART 28.0 2,439,315 0.41 6.327 0.333 1.11 1.70.2 0.99   County U MIN ART 20.6 3,257,080 0.47 6.810 0.360 1.68 24.45 1.29 Apport.   U COLL 21.0 1,190,613 0.47 6.772 0.358 0.61 8.89 0.47 Factor   U COLL 21.0 1,190,613 0.47 6.772 0.358 0.61 8.89 0.47 Factor   U LOCAL 12.9 1,454,696 0.82 7.210 0.346 1.00 11.56 0.55   FAYETTE COU RAMP 34.6 218,896 0.40 7.968 0.366 0.10 1.92 0.09   VOC tpd CO tpd CO tpd CO tpd    13,105,686   | I WIND OOLL   |  |   | 0  |          | 0.000   | 0.000   | 0.000  |               | 0.00  |  |  |                      |  | <b>2</b> U,                             | 3(   | J                                |
| U PRIN ART  28.0 2,439,315  0.41 6,327  0.333  1.11 17.02  0.90 County  U MIN ART  28.0 3,257,080  0.47 6,810  0.360  1.68 24,45  1.29 Apport.  U COLL  12.9 1,454,696  0.62 7,210  0.346  1.00 11.56  0.55  FAYETTE COU  RAMP  34.6 218,896  0.40 7,968  0.366  0.10 1.92  0.90  VOC tpd CO tpd  VOC tpd CO Unity  SCENARIO:  ROAD CLASS  DVMT DVMT W/Ramp  VOC EF  COEF  NOX EF  VOC tpd CO Unity  R MIN ART  49.9 17,235  17,235  13,461,998  13,461  394,841  39  | R MIN COLL  |  |   | 0 0  |          | 0.000<br>0.000<br>0.000   | 0.000<br>0.000<br>0.000   | 0.000<br>0.000<br>0.000  |               | 0.00<br>0.00<br>0.00  | 0.00   | 0.00   |                      |  | 20.                                     | 3(   | <b>)</b>                         |
| UPRIN ART   28.0   2.439.315   0.41   6.327   0.333   1.11   17.02   0.90   County   | R MIN COLL<br>R LOCAL   |  | 49.0  | 0<br>0<br>0  |          | 0.000<br>0.000<br>0.000<br>0.000  | 0.000<br>0.000<br>0.000<br>0.000  | 0.000<br>0.000<br>0.000<br>0.000   |               | 0.00<br>0.00<br>0.00<br>0.00  | 0.00<br>0.00<br>0.00   | 0.00<br>0.00<br>0.00   |                      |  | 20.                                     | 3(   |                                  |
| U COLL   | R MIN COLL<br>R LOCAL<br>U INTERST  |  |   | 0<br>0<br>0<br>0<br>3,432,054  |          | 0.000<br>0.000<br>0.000<br>0.000<br>0.35  | 0.000<br>0.000<br>0.000<br>0.000<br>7.139   | 0.000<br>0.000<br>0.000<br>0.000<br>0.347  |               | 0.00<br>0.00<br>0.00<br>0.00<br>1.32  | 0.00<br>0.00<br>0.00<br>27.01  | 0.00<br>0.00<br>0.00<br>1.31   |                      |  | 20.                                     | 3(   |                                  |
| U LOCAL   12.9   1,454,696   0.62   7.210   0.346   1.00   11,56   0.55  | R MIN COLL<br>R LOCAL<br>U INTERST<br>U FREEWAY   |  | 50.5  | 0<br>0<br>0<br>0<br>3,432,054<br>1,113,032   |          | 0.000<br>0.000<br>0.000<br>0.000<br>0.35<br>0.35  | 0.000<br>0.000<br>0.000<br>0.000<br>7.139<br>7.237  | 0.000<br>0.000<br>0.000<br>0.000<br>0.347<br>0.352   |               | 0.00<br>0.00<br>0.00<br>0.00<br>1.32<br>0.42  | 0.00<br>0.00<br>0.00<br>27.01<br>8.88  | 0.00<br>0.00<br>0.00<br>1.31<br>0.43   | Cou                  |  | <b>2</b> 0.                             | <b>3</b> (   |                                  |
| RAMP 34.6 218,896 0.40 7.968 0.366 0.10 1.92 0.09  | R MIN COLL<br>R LOCAL<br>U INTERST<br>U FREEWAY<br>U PRIN ART<br>U MIN ART  |  | 50.5<br>28.0<br>20.6  | 0<br>0<br>0<br>0<br>3,432,054<br>1,113,032<br>2,439,315<br>3,257,080   |          | 0.000<br>0.000<br>0.000<br>0.000<br>0.35<br>0.35<br>0.41  | 0.000<br>0.000<br>0.000<br>0.000<br>7.139<br>7.237<br>6.327<br>6.810  | 0.000<br>0.000<br>0.000<br>0.000<br>0.347<br>0.352<br>0.333<br>0.360   |               | 0.00<br>0.00<br>0.00<br>0.00<br>1.32<br>0.42<br>1.11<br>1.68  | 0.00<br>0.00<br>0.00<br>27.01<br>8.88<br>17.02<br>24.45  | 0.00<br>0.00<br>0.00<br>1.31<br>0.43<br>0.90<br>1.29   | App                  | nty<br>ort.                                  | 20.                                     | 3(   |                                  |
| Table   Tab    | R MIN COLL<br>R LOCAL<br>U INTERST<br>U FREEWAY<br>U PRIN ART<br>U MIN ART<br>U COLL  |  | 50.5<br>28.0<br>20.6<br>21.0  | 0<br>0<br>0<br>3,432,054<br>1,113,032<br>2,439,315<br>3,257,080<br>1,190,613   |          | 0.000<br>0.000<br>0.000<br>0.000<br>0.35<br>0.35<br>0.41<br>0.47  | 0.000<br>0.000<br>0.000<br>0.000<br>7.139<br>7.237<br>6.327<br>6.810<br>6.772   | 0.000<br>0.000<br>0.000<br>0.000<br>0.347<br>0.352<br>0.333<br>0.360<br>0.358  |               | 0.00<br>0.00<br>0.00<br>0.00<br>1.32<br>0.42<br>1.11<br>1.68<br>0.61  | 0.00<br>0.00<br>0.00<br>27.01<br>8.88<br>17.02<br>24.45<br>8.89  | 0.00<br>0.00<br>0.00<br>1.31<br>0.43<br>0.90<br>1.29<br>0.47   | App                  | nty<br>ort.                                  |   |  |                                  |
| YEAR: 2030 Mobile Model UM6.2 APPLICABLE APPORTIONMENT FACTOR NOT REFLECTED  COUNTY: Scott  SCENARIO: M6.2 Defaults  ROAD CLASS  DVMT DVMT w/ Ramp VOC EF CO EF NOX EF VOC tpd CO tpd NOX tpd  RINTERST 54.1 2,126,486 2,094,588 0.339 7.304 0.356 0.78 16.87 0.82  R PRIN ART 54.1 234,192 234,192 1.690 15.089 0.595 0.44 3.90 0.15 County  R MIN ART 49.9 177,235 177,235 0.346 7.019 0.344 0.07 1.37 0.07 Apport.  R MAJ COLL 47.6 394,841 394,841 0.350 6.898 0.339 0.15 3.00 0.15 Factor  R MIN COLL 53.8 246,832 246,832 0.340 7.252 0.354 0.09 1.97 0.10 SCOTT COUN  R LOCAL 38.4 142,519 142,519 0.623 7.210 0.346 0.10 1.13 0.05 VOC tpd CO tpd U INTERST 0 0 0.341 7.487 0.363 0.00 0.00 0.00 0.00 V U FREEWAY 0 0 0 0.2907 20.260 0.639 0.00 0.00 0.00 0.00 100.0% 2.10 35.59 U PRIN ART 34.1 419,459 419,459 0.384 6.241 0.323 0.18 2.89 0.15 U MIN ART 32.5 236,428 236,428 0.391 6.246 0.325 0.10 1.63 0.08 U COLL 30.5 264,412 264,412 0.400 6.252 0.327 0.12 1.82 0.10 U LOCAL 31.7 91,716 91,716 0.623 7.210 0.346 0.06 0.73 0.03 RAMP 0 31,897 0.404 7.968 0.366 0.01 0.28 0.01 LEXINGTON A VOC tpd CO tpd   | R MIN COLL R LOCAL U INTERST U FREEWAY U PRIN ART U MIN ART U COLL U LOCAL  |  | 50.5<br>28.0<br>20.6<br>21.0<br>12.9  | 0<br>0<br>0<br>3,432,054<br>1,113,032<br>2,439,315<br>3,257,080<br>1,190,613<br>1,454,696  |          | 0.000<br>0.000<br>0.000<br>0.000<br>0.35<br>0.35<br>0.41<br>0.47<br>0.47  | 0.000<br>0.000<br>0.000<br>0.000<br>7.139<br>7.237<br>6.327<br>6.810<br>6.772<br>7.210  | 0.000<br>0.000<br>0.000<br>0.000<br>0.347<br>0.352<br>0.333<br>0.360<br>0.358  |               | 0.00<br>0.00<br>0.00<br>0.00<br>1.32<br>0.42<br>1.11<br>1.68<br>0.61<br>1.00  | 0.00<br>0.00<br>0.00<br>27.01<br>8.88<br>17.02<br>24.45<br>8.89  | 0.00<br>0.00<br>0.00<br>1.31<br>0.43<br>0.90<br>1.29<br>0.47   | App                  | nty<br>ort.                                  | FAY                                     | YETTE COL  | JNTY                             |
| COUNTY: Scott   Scott   COUNTY TOTALS ARE LATER APPORTIONED    SCENARIO: M6.2 Defaults   VOC EF   CO EF   NOx EF   VOC tpd   CO tpd   NOx tpd   Speeds       | R MIN COLL R LOCAL U INTERST U FREEWAY U PRIN ART U MIN ART U COLL U LOCAL  |  | 50.5<br>28.0<br>20.6<br>21.0<br>12.9  | 0<br>0<br>0<br>3,432,054<br>1,113,032<br>2,439,315<br>3,257,080<br>1,190,613<br>1,454,696  |          | 0.000<br>0.000<br>0.000<br>0.000<br>0.35<br>0.35<br>0.41<br>0.47<br>0.47  | 0.000<br>0.000<br>0.000<br>0.000<br>7.139<br>7.237<br>6.327<br>6.810<br>6.772<br>7.210  | 0.000<br>0.000<br>0.000<br>0.000<br>0.347<br>0.352<br>0.333<br>0.360<br>0.358  |               | 0.00<br>0.00<br>0.00<br>0.00<br>1.32<br>0.42<br>1.11<br>1.68<br>0.61<br>1.00  | 0.00<br>0.00<br>0.00<br>27.01<br>8.88<br>17.02<br>24.45<br>8.89  | 0.00<br>0.00<br>0.00<br>1.31<br>0.43<br>0.90<br>1.29<br>0.47   | App                  | nty<br>ort.                                  | FAY                                     | YETTE COL  | JNTY                             |
| COUNTY: Scott   Scott   COUNTY TOTALS ARE LATER APPORTIONED    SCENARIO: M6.2 Defaults   VOC EF   CO EF   NOx EF   VOC tpd   CO tpd   NOx tpd   Speeds       | R MIN COLL R LOCAL U INTERST U FREEWAY U PRIN ART U MIN ART U COLL U LOCAL  |  | 50.5<br>28.0<br>20.6<br>21.0<br>12.9  | 0<br>0<br>0<br>3,432,054<br>1,113,032<br>2,439,315<br>3,257,080<br>1,190,613<br>1,454,696<br>218,896   |          | 0.000<br>0.000<br>0.000<br>0.000<br>0.35<br>0.35<br>0.41<br>0.47<br>0.47  | 0.000<br>0.000<br>0.000<br>0.000<br>7.139<br>7.237<br>6.327<br>6.810<br>6.772<br>7.210  | 0.000<br>0.000<br>0.000<br>0.000<br>0.347<br>0.352<br>0.333<br>0.360<br>0.358  |               | 0.00<br>0.00<br>0.00<br>0.00<br>1.32<br>0.42<br>1.11<br>1.68<br>0.61<br>1.00  | 0.00<br>0.00<br>27.01<br>8.88<br>17.02<br>24.45<br>8.89<br>11.56   | 0.00<br>0.00<br>0.00<br>1.31<br>0.43<br>0.90<br>1.29<br>0.47<br>0.55   | App<br>Fac           | nty<br>ort.                                  | FA\\ VOC tpd                            | CO tpd   | JNTY<br>NOx tpc                  |
| SCENARIO:         M6.2 Defaults         DVMT DVMT w/ Ramp         VOC EF         CO EF         NOx EF         VOC tpd         CO tpd         NOx tpd           Speeds         Speeds         Speeds         DVMT DVMT w/ Ramp         VOC EF         CO EF         NOx EF         VOC tpd         CO tpd         NOx tpd           R INTERST         54.1         2.126,486         2.094,588         0.339         7.304         0.356         0.78         16.87         0.82           R PRIN ART         54.1         234,192         234,192         1.690         15.089         0.595         0.44         3.90         0.15         County           R MIN ART         49.9         177,235         177,235         0.346         7.019         0.344         0.07         1.37         0.07         Apport.           R MAJ COLL         47.6         394,841         0.350         6.898         0.339         0.15         3.00         0.15         Factor           R MIN COLL         53.8         246,832         246,832         0.340         7.252         0.354         0.09         1.97         VOC tpd         CO tpd           U INTERST         0         0         0.341         7.487         0.363         0.00   | R MIN COLL R LOCAL U INTERST U FREEWAY U PRIN ART U MIN ART U COLL U LOCAL RAMP   |  | 50.5<br>28.0<br>20.6<br>21.0<br>12.9<br>34.6  | 0<br>0<br>3,432,054<br>1,113,032<br>2,439,315<br>3,257,080<br>1,190,613<br>1,454,696<br>218,896  |          | 0.000<br>0.000<br>0.000<br>0.000<br>0.35<br>0.35<br>0.41<br>0.47<br>0.47<br>0.62<br>0.40  | 0.000<br>0.000<br>0.000<br>0.000<br>7.139<br>7.237<br>6.327<br>6.810<br>6.772<br>7.210<br>7.968   | 0.000<br>0.000<br>0.000<br>0.000<br>0.347<br>0.352<br>0.333<br>0.360<br>0.358<br>0.346   |               | 0.00<br>0.00<br>0.00<br>0.00<br>1.32<br>0.42<br>1.11<br>1.68<br>0.61<br>1.00<br>0.10  | 0.00<br>0.00<br>27.01<br>8.88<br>17.02<br>24.45<br>8.89<br>11.56<br>1.92   | 0.00<br>0.00<br>0.00<br>1.31<br>0.43<br>0.90<br>1.29<br>0.47<br>0.55<br>0.09   | App<br>Fac           | nty<br>ort.                                  | FA\\ VOC tpd                            | CO tpd   | INTY<br>NOx tpc                  |
| ROAD CLASS   DVMT   DVMT w/ Ramp   VOC EF   CO EF   NOx EF   VOC tpd   CO tpd   NOx tpd  | R MIN COLL R LOCAL U INTERST U FREEWAY U PRIN ART U MIN ART U COLL U LOCAL RAMP   |  | 50.5<br>28.0<br>20.6<br>21.0<br>12.9<br>34.6  | 0<br>0<br>3,432,054<br>1,113,032<br>2,439,315<br>3,257,080<br>1,190,613<br>1,454,696<br>218,896  | el UM    | 0.000<br>0.000<br>0.000<br>0.000<br>0.35<br>0.35<br>0.41<br>0.47<br>0.47<br>0.62<br>0.40  | 0.000<br>0.000<br>0.000<br>0.000<br>7.139<br>7.237<br>6.327<br>6.810<br>6.772<br>7.210<br>7.968   | 0.000<br>0.000<br>0.000<br>0.347<br>0.352<br>0.333<br>0.360<br>0.358<br>0.346  |               | 0.00<br>0.00<br>0.00<br>0.00<br>1.32<br>0.42<br>1.11<br>1.68<br>0.61<br>1.00<br>0.10<br>6.25  | 0.00<br>0.00<br>0.00<br>27.01<br>8.88<br>17.02<br>24.45<br>8.89<br>11.56<br>1.92<br>99.74  | 0.00<br>0.00<br>0.00<br>1.31<br>0.43<br>0.90<br>1.29<br>0.47<br>0.55<br>0.09   | App<br>Fac           | nty<br>ort.                                  | FA\\ VOC tpd                            | CO tpd   | JNTY<br>NOx tpc                  |
| R INTERST 54.1 2,126,486 2,094,588 0.339 7.304 0.356 0.78 16.87 0.82 R PRIN ART 54.1 234,192 234,192 1.690 15.089 0.595 0.44 3.90 0.15 County R MIN ART 49.9 177,235 177,235 0.346 7.019 0.344 0.07 1.37 0.07 Apport. R MAJ COLL 47.6 394,841 394,841 0.350 6.898 0.339 0.15 3.00 0.15 Factor R MIN COLL 53.8 246,832 246,832 0.340 7.252 0.354 0.09 1.97 0.10 SCOTT COUN R LOCAL 38.4 142,519 142,519 0.623 7.210 0.346 0.10 1.13 0.05 VOC tpd CO tpd U INTERST 0 0 0 0.341 7.487 0.363 0.00 0.00 0.00 0.00 V U FREEWAY 0 0 0 2.907 20.260 0.639 0.00 0.00 0.00 100.0% 2.10 35.59 U PRIN ART 34.1 419,459 419,459 0.384 6.241 0.323 0.18 2.89 0.15 U MIN ART 32.5 236,428 236,428 0.391 6.246 0.325 0.10 1.63 0.08 U COLL 30.5 264,412 264,412 0.400 6.252 0.327 0.12 1.82 0.10 U COLL 30.5 264,412 264,412 0.400 6.252 0.327 0.12 1.82 0.10 U COLL 31,7 91,716 91,716 0.623 7.210 0.346 0.06 0.73 0.03 COLD 1.28 0.01 U COLL 31,897 0.404 7.968 0.366 0.01 0.28 0.01 CLEXINGTON A COLD 1.28 0.01 CLEXINGTON A COLD   | R MIN COLL R LOCAL U INTERST U FREEWAY U PRIN ART U MIN ART U COLL U LOCAL RAMP  YEAR: COUNTY:  |  | 50.5<br>28.0<br>20.6<br>21.0<br>12.9<br>34.6  | 0<br>0<br>3,432,054<br>1,113,032<br>2,439,315<br>3,257,080<br>1,190,613<br>1,454,696<br>218,896  | el UN    | 0.000<br>0.000<br>0.000<br>0.000<br>0.35<br>0.35<br>0.41<br>0.47<br>0.47<br>0.62<br>0.40  | 0.000<br>0.000<br>0.000<br>0.000<br>7.139<br>7.237<br>6.327<br>6.810<br>6.772<br>7.210<br>7.968   | 0.000<br>0.000<br>0.000<br>0.347<br>0.352<br>0.333<br>0.360<br>0.358<br>0.346  |               | 0.00<br>0.00<br>0.00<br>0.00<br>1.32<br>0.42<br>1.11<br>1.68<br>0.61<br>1.00<br>0.10<br>6.25  | 0.00<br>0.00<br>0.00<br>27.01<br>8.88<br>17.02<br>24.45<br>8.89<br>11.56<br>1.92<br>99.74  | 0.00<br>0.00<br>0.00<br>1.31<br>0.43<br>0.90<br>1.29<br>0.47<br>0.55<br>0.09   | App<br>Fac           | nty<br>ort.<br>etor                          | FA\\ VOC tpd                            | CO tpd   | JNTY<br>NOx tpc                  |
| R PRIN ART 54.1 234,192 234,192 1.690 15.089 0.595 0.44 3.90 0.15 County  R MIN ART 49.9 177,235 177,235 0.346 7.019 0.344 0.07 1.37 0.07 Apport.  R MAJ COLL 47.6 394,841 394,841 0.350 6.898 0.339 0.15 3.00 0.15 Factor  R MIN COLL 53.8 246,832 246,832 246,832 0.340 7.252 0.354 0.09 1.97 0.10 SCOTT COUNTY  R LOCAL 38.4 142,519 142,519 0.623 7.210 0.346 0.10 1.13 0.05 VOC tpd CO tpd U INTERST 0 0 0.341 7.487 0.363 0.00 0.00 0.00 0.00 VU FREEWAY 0 0 0.2,907 20.260 0.639 0.00 0.00 0.00 100.0% 2.10 35.59 U PRIN ART 34.1 419,459 419,459 0.384 6.241 0.323 0.18 2.89 0.15 U MIN ART 32.5 236,428 236,428 0.391 6.246 0.325 0.10 1.63 0.08 U COLL 30.5 264,412 264,412 0.400 6.252 0.327 0.12 1.82 0.10 U COLL 30.5 264,412 264,412 0.400 6.252 0.327 0.12 1.82 0.10 U COLL 31.7 91,716 91,716 0.623 7.210 0.346 0.06 0.73 0.03 RAMP 0 31,897 0.404 7.968 0.366 0.01 0.28 0.01 LEXINGTON A VOC tpd CO tpd C  | R MIN COLL R LOCAL U INTERST U FREEWAY U PRIN ART U MIN ART U COLL U LOCAL RAMP  YEAR: COUNTY: SCENARIO:  |  | 50.5<br>28.0<br>20.6<br>21.0<br>12.9<br>34.6<br>2030<br>Scott<br>M6.2 Defaults  | 0<br>0<br>3,432,054<br>1,113,032<br>2,439,315<br>3,257,080<br>1,190,613<br>1,454,696<br>218,896<br>13,105,686<br>Mobile Mode   |          | 0.000<br>0.000<br>0.000<br>0.000<br>0.35<br>0.35<br>0.47<br>0.47<br>0.62<br>0.40  | 0.000<br>0.000<br>0.000<br>7.139<br>7.237<br>6.327<br>6.810<br>6.772<br>7.210<br>7.968  | 0.000<br>0.000<br>0.000<br>0.000<br>0.347<br>0.352<br>0.333<br>0.360<br>0.358<br>0.346<br>0.366  | YTNUC         | 0.00<br>0.00<br>0.00<br>0.00<br>1.32<br>0.42<br>1.11<br>1.68<br>0.61<br>1.00<br>0.10<br>6.25  | 0.00<br>0.00<br>0.00<br>27.01<br>8.88<br>17.02<br>24.45<br>8.89<br>11.56<br>1.92<br>99.74  | 0.00 0.00 0.00 1.31 0.43 0.90 1.29 0.47 0.55 0.09  | App<br>Fac           | nty<br>ort.<br>etor                          | FA\\ VOC tpd                            | CO tpd   | JNTY<br>NOx tpc                  |
| R MIN ART 49.9 177,235 177,235 0.346 7.019 0.344 0.07 1.37 0.07 Apport.  R MAJ COLL 47.6 394,841 394,841 0.350 6.898 0.339 0.15 3.00 0.15 Factor  R MIN COLL 53.8 246,832 246,832 0.340 7.252 0.354 0.09 1.97 0.10   SCOTT COUN  R LOCAL 38.4 142,519 142,519 0.623 7.210 0.346 0.10 1.13 0.05 VOC tpd CO tpd  U INTERST 0 0 0.341 7.487 0.363 0.00 0.00 0.00 0.00 V  U FREEWAY 0 0 0 2.907 20.260 0.639 0.00 0.00 0.00 100.0% 2.10 35.59  U PRIN ART 34.1 419,459 419,459 0.384 6.241 0.323 0.18 2.89 0.15  U MIN ART 32.5 236,428 236,428 0.391 6.246 0.325 0.10 1.63 0.08  U COLL 30.5 264,412 264,412 0.400 6.252 0.327 0.12 1.82 0.10  U LOCAL 31.7 91,716 91,716 0.623 7.210 0.346 0.06 0.73 0.03  RAMP 0 31,897 0.404 7.968 0.366 0.01 0.28 0.01  LEXINGTON A  VOC tpd CO tpd  CO tpd  CO tpd  CO tpd  CO tpd  CO tpd  CO tpd  CO tpd  CO tpd  CO tpd  CO tpd  CO tpd  CO tpd  CO tpd  CO tpd   | R MIN COLL R LOCAL U INTERST U FREEWAY U PRIN ART U MIN ART U COLL U LOCAL RAMP  YEAR: COUNTY: SCENARIO: ROAD CLASS   | Speeds   | 50.5<br>28.0<br>20.6<br>21.0<br>12.9<br>34.6<br>2030<br>Scott<br>M6.2 Defaults  | 0<br>0<br>3,432,054<br>1,113,032<br>2,439,315<br>3,257,080<br>1,190,613<br>1,454,696<br>218,896<br>13,105,686<br>Mobile Mode   |          | 0.000<br>0.000<br>0.000<br>0.000<br>0.35<br>0.35<br>0.41<br>0.47<br>0.62<br>0.40  | 0.000<br>0.000<br>0.000<br>0.000<br>7.139<br>7.237<br>6.810<br>6.772<br>7.210<br>7.968  | 0.000 0.000 0.000 0.000 0.347 0.352 0.333 0.360 0.358 0.346 0.366  | YTNUC         | 0.00<br>0.00<br>0.00<br>0.00<br>1.32<br>0.42<br>1.11<br>1.68<br>0.61<br>1.00<br>0.10<br>6.25  | 0.00 0.00 0.00 27.01 8.88 17.02 24.45 8.89 11.56 1.92 99.74 ACTOR NOT  | 0.00 0.00 0.00 1.31 1.31 0.43 0.90 1.29 0.47 0.55 0.09  5.05  REFLECTED PORTIONED)   | App<br>Fac           | nty<br>ort.<br>etor                          | FA\\ VOC tpd                            | CO tpd   | JNTY<br>NOx tpc                  |
| R MAJ COLL 47.6 394,841 394,841 0.350 6.898 0.339 0.15 3.00 0.15 Factor   R MIN COLL 53.8 246,832 246,832 0.340 7.252 0.354 0.09 1.97 0.10 SCOTT COUN   R LOCAL 38.4 142,519 142,519 0.623 7.210 0.346 0.10 1.13 0.05 VOC tpd CO   | R MIN COLL R LOCAL U INTERST U FREEWAY U PRIN ART U MIN ART U COLL U LOCAL RAMP  YEAR: COUNTY: SCENARIO: ROAD CLASS   | Speeds<br>54.1   | 50.5<br>28.0<br>20.6<br>21.0<br>12.9<br>34.6<br>2030<br>Scott<br>M6.2 Defaults<br>DVMT  | 0<br>0<br>3,432,054<br>1,113,032<br>2,439,315<br>3,257,080<br>1,190,613<br>1,454,696<br>218,896<br>13,105,686<br>Mobile Mode   |          | 0.000<br>0.000<br>0.000<br>0.000<br>0.35<br>0.35<br>0.41<br>0.47<br>0.62<br>0.40<br>W6.2  | 0.000<br>0.000<br>0.000<br>7.139<br>7.237<br>6.327<br>7.210<br>7.968  | 0.000 0.000 0.000 0.000 0.347 0.352 0.333 0.360 0.358 0.346 0.366  | YTNUC         | 0.00<br>0.00<br>0.00<br>0.00<br>1.32<br>0.42<br>1.11<br>1.68<br>0.61<br>1.00<br>0.10<br>6.25<br>COMMENT FATOTALS ARI                                | 0.00 0.00 0.00 27.01 8.88 17.02 24.45 8.89 11.56 1.92 99.74 ACTOR NOT E LATER APP  | 0.00 0.00 0.00 1.31 1.31 0.43 0.90 1.29 0.47 0.55 0.09 5.05  REFLECTED PORTIONED) NOx tpd  | App<br>Fac           | nty<br>ort.<br>stor                          | FA\\ VOC tpd                            | CO tpd   | JNTY<br>NOx tpc                  |
| R LOCAL 38.4 142,519 142,519 0.623 7.210 0.346 0.10 1.13 0.05  | R MIN COLL R LOCAL U INTERST U FREEWAY U PRIN ART U MIN ART U COLL U LOCAL RAMP  YEAR: COUNTY: SCENARIO: ROAD CLASS R INTERST R PRIN ART  | <b>Speeds</b> 54.1 54.1                                | 50.5 28.0 20.6 21.0 12.9 34.6  2030 Scott M6.2 Defaults DVMT 2,126,486 234,192  | 0<br>0<br>3,432,054<br>1,113,032<br>2,439,315<br>3,257,080<br>1,190,613<br>1,454,696<br>218,896<br>Mobile Model  |          | 0.000<br>0.000<br>0.000<br>0.000<br>0.35<br>0.35<br>0.47<br>0.47<br>0.62<br>0.40<br>VOC EF  | 0.000<br>0.000<br>0.000<br>7.139<br>7.237<br>6.327<br>6.810<br>6.772<br>7.210<br>7.968  | 0.000 0.000 0.000 0.000 0.347 0.352 0.333 0.360 0.358 0.346 0.366  O.366  NOX EF   | YTNUC         | 0.00 0.00 0.00 0.00 1.32 0.42 1.11 1.68 0.61 1.00 0.10 6.25 IONMENT FATOTALS ARI  | 0.00<br>0.00<br>27.01<br>8.88<br>17.02<br>24.45<br>8.89<br>11.56<br>1.92<br>99.74<br>ACTOR NOT<br>E LATER API  | 0.00 0.00 0.00 1.31 0.43 0.90 1.29 1.29 1.29 0.47 0.55 0.09  5.05  REFLECTED PORTIONED)  NOX tpd  0.82 0.15  | App<br>Fac<br>100.   | nty<br>ort.<br>stor                          | FA\\ VOC tpd                            | CO tpd   | JNTY<br>NOx tpc                  |
| U INTERST         0         0         0.341         7.487         0.363         0.00         0.00         0.00         0.00         100.0%         2.10         35.59           U FRIN ART         34.1         419,459         419,459         0.384         6.241         0.323         0.18         2.89         0.15         0.15         0.15         0.15         0.00         0.0  | R MIN COLL R LOCAL U INTERST U FREEWAY U PRIN ART U MIN ART U COLL U LOCAL RAMP  YEAR: COUNTY: SCENARIO: ROAD CLASS R INTERST R PRIN ART R MIN ART R MIN ART  | 54.1<br>54.1<br>49.9<br>47.6                           | 50.5<br>28.0<br>20.6<br>21.0<br>12.9<br>34.6<br>2030<br>Scott<br>M6.2 Defaults<br>DVMT<br>2,126,486<br>234,192<br>177,235   | 0<br>0<br>3,432,054<br>1,113,032<br>2,439,315<br>3,257,080<br>1,190,613<br>1,454,696<br>218,896<br>13,105,686<br>Mobile Mode   |          | 0.000<br>0.000<br>0.000<br>0.000<br>0.35<br>0.35<br>0.41<br>0.47<br>0.62<br>0.40<br>W6.2  | 0.000<br>0.000<br>0.000<br>7.139<br>7.237<br>6.810<br>6.772<br>7.210<br>7.968<br>AA<br>CO EF<br>7.304<br>15.089<br>7.019<br>6.898                   | 0.000 0.000 0.000 0.000 0.347 0.352 0.333 0.360 0.358 0.346 0.366  NOX EF  0.356 0.595 0.344 0.339   | YTNUC         | 0.00 0.00 0.00 0.00 1.32 0.42 1.11 1.68 0.61 1.00 0.10 6.25  IONMENT F.A TOTALS ARI  VOC tpd  0.78 0.44 0.07  | 0.00 0.00 0.00 27.01 8.88 17.02 24.45 8.89 11.56 1.92 99.74 ACTOR NOT E LATER API  CO tpd 16.87 3.90 1.37 3.00   | 0.00 0.00 0.00 1.31 0.43 0.90 1.29 0.47 0.55 0.09  5.05  NOx tpd   | App<br>Fac<br>100.   | nty<br>ort.<br>ttor<br>0%                    | FAY<br>VOC tpd<br>6.25                  | /ETTE COU<br>CO tpd  | NOX tpc 5.08                     |
| U FREEWAY         0         0         2.907         20.260         0.639         0.00         0.00         0.00         100.0%         2.10         35.59           U PRIN ART         34.1         419,459         419,459         0.384         6.241         0.323         0.18         2.89         0.15         0.05         0.05         0.00         0.0   | R MIN COLL R LOCAL U INTERST U FREEWAY U PRIN ART U MIN ART U COLL LOCAL RAMP  YEAR: COUNTY: SCENARIO: ROAD CLASS R INTERST R PRIN ART R MIN ART R MAT R MAT R MAT COLL R MIN COLL  | 54.1<br>54.1<br>49.9<br>47.6<br>53.8                   | 50.5 28.0 20.6 21.0 12.9 34.6  2030 Scott M6.2 Defaults  DVMT  2,126,486 234,192 177,235 394,841 246,832  | 0<br>0<br>3,432,054<br>1,113,032<br>2,439,315<br>3,257,080<br>1,190,613<br>1,454,696<br>218,896<br>Mobile Mode<br>DVMT w/ Ra<br>2,094,588<br>234,192<br>177,235<br>334,841<br>246,832  |          | 0.000<br>0.000<br>0.000<br>0.000<br>0.35<br>0.35<br>0.47<br>0.47<br>0.62<br>0.40<br>W6.2<br>VOC EF<br>0.339<br>1.690<br>0.340                                     | 0.000<br>0.000<br>0.000<br>7.139<br>7.237<br>6.327<br>7.210<br>7.968<br>AA<br>CO EF<br>7.304<br>15.089<br>7.019                                     | 0.000 0.000 0.000 0.000 0.347 0.352 0.333 0.360 0.358 0.346 0.366  PPLICABLE AI (CO  NOX EF  0.356 0.595 0.344 0.339 0.354                             | YTNUC         | 0.00 0.00 0.00 0.00 1.32 0.42 1.11 1.68 0.61 1.00 0.10 6.25 IONMENT F. TOTALS ARI  VOC tpd  0.78 0.44 0.07 0.15 0.09                                | 0.00<br>0.00<br>27.01<br>8.88<br>17.02<br>24.45<br>8.89<br>11.56<br>1.92<br>99.74<br>ACTOR NOT<br>E LATER APP<br>CO tpd<br>16.87<br>3.90<br>1.37           | 0.00 0.00 0.00 1.31 0.43 0.90 1.29 0.47 0.55 0.09  S.05  REFLECTED PORTIONED) NOX tpd 0.82 0.15 0.07 0.155 0.01  | App<br>Fac<br>100.   | nty<br>ort.<br>ttor<br>0%                    | FA\ VOC tpd 6.25                        | ETTE COU   | NTY NOx tpc 5.08                 |
| U PRIN ART         34.1         419,459         419,459         0.384         6.241         0.323         0.18         2.89         0.15           U MIN ART         32.5         236,428         236,428         0.391         6.246         0.325         0.10         1.63         0.08           U COLL         30.5         264,412         264,412         0.400         6.252         0.327         0.12         1.82         0.10           U LOCAL         31.7         91,716         91,716         0.623         7.210         0.346         0.06         0.73         0.03           RAMP         0         31,897         0.404         7.968         0.366         0.01         0.28         0.01           LEXINGTON A           LEXINGTON A   | R MIN COLL R LOCAL U INTERST U FREEWAY U PRIN ART U MIN ART U COLL U LOCAL RAMP  YEAR: COUNTY: SCENARIO: ROAD CLASS R INTERST R PRIN ART R MIN ART R MIN ART R MIN ART R MIN COLL R MIN COLL R MIN COLL R LOCAL   | 54.1<br>54.1<br>49.9<br>47.6<br>53.8                   | 50.5 28.0 20.6 21.0 12.9 34.6  2030 Scott M6.2 Defaults  DVMT  2,126,486 234,192 177,235 34,841 246,832 142,519   | 0<br>0<br>3,432,054<br>1,113,032<br>2,439,315<br>3,257,080<br>1,190,613<br>1,454,696<br>218,896<br>Mobile Mode<br>DVMT w/ Ra<br>2,094,588<br>234,192<br>177,235<br>394,841<br>246,832<br>142,519   |          | 0.000<br>0.000<br>0.000<br>0.000<br>0.35<br>0.35<br>0.47<br>0.47<br>0.62<br>0.40<br>VOC EF<br>0.339<br>1.690<br>0.346<br>0.350<br>0.340                           | 0.000<br>0.000<br>0.000<br>7.139<br>7.237<br>6.327<br>6.810<br>7.210<br>7.968<br>AF<br>CO EF<br>7.304<br>15.089<br>7.019<br>6.898<br>7.252<br>7.210 | 0.000 0.000 0.000 0.000 0.347 0.352 0.333 0.360 0.358 0.346 0.366  PPLICABLE AI (CO  NOX EF  0.356 0.595 0.344 0.339 0.354                             | YTNUC         | 0.00 0.00 0.00 0.00 1.32 0.42 1.11 1.68 0.61 1.00 0.10 6.25 IONMENT F/ TOTALS ARI VOC tpd 0.78 0.44 0.07 0.15 0.099 0.10                            | 0.00 0.00 27.01 8.88 17.02 24.45 8.89 11.56 1.92 99.74 ACTOR NOT E LATER APP CO tpd 16.87 3.90 1.37 3.00 1.97  | 0.00 0.00 0.00 1.31 0.43 0.90 1.29 1.29 0.47 0.55 0.09  Solution of the control o | App<br>Fac<br>100.   | nty<br>ort.<br>ttor<br>0%                    | FA\ VOC tpd 6.25                        | ETTE COU   | NTY NOx tpc 5.08                 |
| U MIN ART         32.5         236,428         236,428         0.391         6.246         0.325         0.10         1.63         0.08           U COLL         30.5         264,412         264,412         0.400         6.252         0.327         0.12         1.82         0.10           U LOCAL         31.7         91,716         91,716         0.623         7.210         0.346         0.06         0.73         0.03           RAMP         0         31,897         0.404         7.968         0.366         0.01         0.28         0.01           LEXINGTON A           4,334,120         4,334,120         2.10         35.59         1.72         VOC tpd         CO tpd   | R MIN COLL R LOCAL U INTERST U FREEWAY U PRIN ART U MIN ART U MIN ART U LOCAL RAMP  YEAR: COUNTY: SCENARIO: ROAD CLASS R INTERST R PRIN ART R MIN ART R MIN ART R MIN COLL R MIN COLL R MIN COLL R MIN COLL R LOCAL U INTERST   | 54.1<br>54.1<br>49.9<br>47.6<br>53.8                   | 50.5 28.0 20.6 21.0 12.9 34.6  2030 Scott  06.2 Defaults  DVMT  2,126,486 234,192 177,235 394,841 246,832 142,519 0   | 0<br>0<br>3,432,054<br>1,113,032<br>2,439,315<br>3,257,080<br>1,190,613<br>1,454,696<br>218,896<br><b>Mobile Mode</b><br><b>Mobile Mode</b><br>2,094,588<br>234,192<br>177,235<br>394,841<br>246,832<br>142,519<br>0                                     |          | 0.000 0.000 0.000 0.000 0.000 0.35 0.35   | 0.000 0.000 0.000 0.000 7.139 7.237 6.327 6.810 6.772 7.210 7.968  AF  CO EF  7.304 15.089 7.019 6.898 7.252 7.210 7.487                            | 0.000 0.000 0.000 0.000 0.347 0.352 0.333 0.360 0.358 0.346 0.366  NOX EF  0.356 0.595 0.344 0.339 0.354 0.346 0.363                                   | YTNUC         | 0.00 0.00 0.00 0.00 0.00 1.32 0.42 1.11 1.68 0.61 1.00 0.10 6.25  IONMENT F/TOTALS ARI VOC tpd 0.78 0.44 0.07 0.15 0.09 0.10 0.00                   | 0.00 0.00 0.00 0.00 27.01 8.88 17.02 24.45 8.89 11.56 1.92 99.74 ACTOR NOT E LATER APP CO tpd 16.87 3.90 1.37 3.00 1.97 1.13                               | 0.00 0.00 0.00 1.31 0.43 0.90 1.29 0.47 0.55 0.09  5.05  NOx tpd  0.82 0.15 0.07 0.15 0.10 0.055 0.00  | App<br>Fac<br>1000   | nty<br>ort.<br>ttor<br>0%                    | FAY<br>VOC tpd<br>6.25                  | 99.74  | NOX tpo                          |
| U COLL 30.5 264,412 264,412 0.400 6.252 0.327 0.12 1.82 0.10 U LOCAL 31.7 91,716 91,716 0.623 7.210 0.346 0.06 0.73 0.03 RAMP 0 31,897 0.404 7.968 0.366 0.01 0.28 0.01 LEXINGTON A 4,334,120 4,334,120 2.10 35.59 1.72 VOC tpd CO tpd   | R MIN COLL R LOCAL U INTERST U FREEWAY U PRIN ART U MIN ART U COLL LOCAL RAMP  YEAR: COUNTY: SCENARIO: ROAD CLASS R INTERST R PRIN ART R MIN ART R MIN ART R MIN COLL R MIN COLL R LOCAL U INTERST U FREEWAY  | 54.1<br>54.1<br>54.1<br>49.9<br>47.6<br>53.8<br>38.4   | 50.5<br>28.0<br>20.6<br>21.0<br>12.9<br>34.6<br>2030<br>Scott<br>M6.2 Defaults<br>DVMT<br>2,126,486<br>234,192<br>177,235<br>394,841<br>246,832<br>142,519<br>0                 | 0<br>0<br>3,432,054<br>1,113,032<br>2,439,315<br>3,257,080<br>1,190,613<br>1,454,696<br>218,896<br>13,105,686<br>Mobile Mode<br>DVMT w/ Ra<br>2,094,588<br>234,192<br>177,235<br>394,841<br>246,832<br>142,519<br>0                                      |          | 0.000<br>0.000<br>0.000<br>0.000<br>0.35<br>0.35<br>0.41<br>0.47<br>0.62<br>0.40<br>W6.2<br>VOC EF<br>0.339<br>1.690<br>0.346<br>0.350<br>0.344<br>0.623<br>0.344 | 0.000 0.000 0.000 0.000 7.139 7.237 6.810 6.772 7.210 7.968  AA CO EF 7.304 15.089 7.252 7.210 7.487  | 0.000 0.000 0.000 0.000 0.347 0.352 0.333 0.360 0.358 0.346 0.366 0.366  NOX EF  0.356 0.595 0.344 0.339 0.354 0.346 0.363                             | YTNUC         | 0.00 0.00 0.00 0.00 0.00 1.32 0.42 1.11 1.68 0.61 1.00 0.10 6.25  CONMENT FATOTALS ARI  VOC tpd  0.78 0.44 0.07 0.15 0.09 0.10 0.000 0.000          | 0.00 0.00 0.00 27.01 8.88 17.02 24.45 8.89 11.56 1.92 99.74 ACTOR NOT E LATER APP CO tpd 16.87 3.90 1.37 3.00 1.97 1.13 0.00 0.00                          | 0.00 0.00 0.00 0.00 1.31 1.31 0.43 0.90 1.29 0.47 0.55 0.09  S.05  NOx tpd 0.82 0.15 0.07 0.15 0.10 0.05 0.00 0.00   | App<br>Fac<br>1000   | nty<br>ort.<br>ttor<br>0%                    | FAY<br>VOC tpd<br>6.25                  | 99.74  | NOX tpu                          |
| RAMP 0 31,897 0.404 7.968 0.366 0.01 0.28 0.01   | R MIN COLL R LOCAL U INTERST U FREEWAY U PRIN ART U MIN ART U COLL LOCAL RAMP  YEAR: COUNTY: SCENARIO: ROAD CLASS R INTERST R PRIN ART R MIN ART R MIN ART R MIN COLL R MIN COLL R LOCAL U INTERST U COLL U INTERST U FREEWAY U PRIN ART  | \$peeds 54.1 54.1 49.9 47.6 53.8 38.4                  | 50.5<br>28.0<br>20.6<br>21.0<br>12.9<br>34.6<br>2030<br>Scott<br>M6.2 Defaults<br>DVMT<br>2,126,486<br>234,192<br>177,235<br>394,841<br>246,832<br>142,519<br>0<br>0<br>419,459 | 0<br>0<br>3,432,054<br>1,113,032<br>2,439,315<br>3,257,080<br>1,190,613<br>1,454,696<br>218,896<br>Mobile Mode<br>2094,588<br>234,192<br>177,235<br>334,841<br>246,832<br>142,519<br>0<br>0<br>419,459   |          | 0.000<br>0.000<br>0.000<br>0.000<br>0.35<br>0.35<br>0.41<br>0.47<br>0.62<br>0.40<br>W6.2<br>VOC EF<br>0.339<br>1.690<br>0.340<br>0.350<br>0.341<br>2.907<br>0.384 | 0.000 0.000 0.000 0.000 7.139 7.237 6.327 7.210 7.968  AP  CO EF  7.304 15.089 7.252 7.210 7.487 20.260 6.241                                       | 0.000 0.000 0.000 0.000 0.347 0.352 0.333 0.360 0.358 0.346 0.366  NOX EF  0.356 0.595 0.344 0.339 0.354 0.346 0.363 0.3639 0.323                      | YTNUC         | 0.00 0.00 0.00 0.00 1.32 0.42 1.11 1.68 0.61 1.00 0.10 6.25 IONMENT FATOTALS ARI  VOC tpd 0.78 0.44 0.07 0.15 0.09 0.10 0.00 0.000 0.000 0.18       | 0.00 0.00 0.00 27.01 8.88 17.02 24.45 8.89 11.56 1.92 99.74 ACTOR NOT E LATER APPL CO tpd 16.87 3.90 1.37 3.00 1.97 1.13 0.00 0.00 0.00                    | 0.00 0.00 1.31 0.43 0.90 1.29 0.47 0.55 0.09  S.05  REFLECTED PORTIONED) NOx tpd 0.82 0.15 0.07 0.15 0.10 0.05 0.00 0.00 0.000 0.15  | App<br>Fac<br>1000   | nty<br>ort.<br>ttor<br>0%                    | FAY<br>VOC tpd<br>6.25                  | 99.74  | NOX tpu                          |
| LEXINGTON A 4,334,120 4,334,120 2.10 35.59 1.72 VOC tpd CO tpd   | R MIN COLL R LOCAL U INTERST U FREEWAY U PRIN ART U MIN ART U COLL RAMP  YEAR: COUNTY: SCENARIO: ROAD CLASS R INTERST R PRIN ART R MIN ART R MIN COLL R MIN COLL U INTERST U FREEWAY U FRIN ART U FREEWAY U PRIN ART U FREEWAY U PRIN ART   | \$peeds  54.1 54.1 49.9 47.6 53.8 38.4  34.1 32.5 30.5 | 50.5 28.0 20.6 21.0 12.9 34.6  2030 Scott  6.2 Defaults  DVMT  2,126,486 234,192 177,235 394,841 246,832 142,519 0 0 419,459 236,428 264,412                                    | 0<br>0<br>3,432,054<br>1,113,032<br>2,439,315<br>3,257,080<br>1,190,613<br>1,454,696<br>218,896<br>Mobile Model<br>Mobile Model<br>2094,588<br>234,192<br>177,235<br>394,841<br>246,832<br>142,519<br>0<br>0<br>419,459<br>236,428<br>264,412            |          | 0.000 0.000 0.000 0.000 0.000 0.35 0.35   | 0.000 0.000 0.000 0.000 7.139 7.237 6.327 6.810 6.772 7.210 7.968  AF  CO EF  7.304 15.089 7.019 6.898 7.252 7.210 7.487 20.260 6.241 6.246 6.252   | 0.000 0.000 0.000 0.000 0.347 0.352 0.333 0.360 0.358 0.346 0.366  NOX EF  0.356 0.595 0.344 0.339 0.354 0.363 0.639 0.323 0.325 0.325                 | YTNUC         | 0.00 0.00 0.00 0.00 0.00 1.32 0.42 1.11 1.68 0.61 1.00 0.10 6.25  CONTROL SARI  VOC tpd 0.78 0.44 0.07 0.15 0.09 0.10 0.00 0.00 0.00 0.18 0.10 0.12 | 0.00 0.00 0.00 0.00 27.01 8.88 17.02 24.45 8.89 11.56 1.92 99.74 ACTOR NOT E LATER APP CO tpd 16.87 3.90 1.37 3.00 1.97 1.13 0.00 0.00 2.89 1.63 1.63 1.82 | 0.00 0.00 0.00 0.00 1.31 0.43 0.90 1.29 0.47 0.55 0.09  SEFLECTED PORTIONED)  NOX tpd  0.82 0.15 0.07 0.15 0.10 0.05 0.00 0.00 0.15 0.00 0.00  | App<br>Fac<br>1000   | nty<br>ort.<br>ttor<br>0%                    | FAY<br>VOC tpd<br>6.25                  | 99.74  | NOX tpu                          |
| 4,334,120 4,334,120 2.10 35.59 1.72 VOC tpd CO tpd   | R MIN COLL R LOCAL U INTERST U FREEWAY U PRIN ART U MIN ART U COLL LOCAL RAMP  YEAR: COUNTY: SCENARIO: ROAD CLASS R INTERST R PRIN ART R MIN ART R MIN COLL R LOCAL U INTERST U FREEWAY U PRIN ART U FREEWAY U PRIN ART U FREEWAY U PRIN ART U MIN ART U MIN ART U MIN ART U COLL U COLL U COLL                               | \$peeds  54.1 54.1 49.9 47.6 53.8 38.4  34.1 32.5 30.5 | 50.5 28.0 20.6 21.0 12.9 34.6  2030 Scott  M6.2 Defaults  DVMT  2,126,486 234,192 177,235 394,841 246,832 142,519 0 419,459 236,428 236,428 91,716                              | 0<br>0<br>0<br>3,432,054<br>1,113,032<br>2,439,315<br>3,257,080<br>1,190,613<br>1,454,696<br>218,896<br><b>Mobile Mode</b><br><b>Mobile Mode</b><br>2,094,588<br>234,192<br>0<br>0<br>419,459<br>236,428<br>241,945<br>9<br>236,428<br>241,912<br>0<br>0 |          | 0.000 0.000 0.000 0.000 0.000 0.35 0.35   | 0.000 0.000 0.000 0.000 7.139 7.237 6.810 6.772 7.210 7.968  AA 44 5.089 7.252 7.210 7.487 20.260 6.241 6.246 6.252 7.210                           | 0.000 0.000 0.000 0.000 0.347 0.352 0.333 0.360 0.358 0.346 0.366 0.366 0.358 0.346 0.366 0.3595 0.344 0.339 0.354 0.366 0.363 0.363 0.323 0.327 0.346 | YTNUC         | 0.00 0.00 0.00 0.00 1.32 0.42 1.11 1.68 0.61 1.00 0.10 6.25  IONMENT FATOTALS ARI  VOC tpd  0.78 0.44 0.07 0.15 0.09 0.10 0.00 0.00 0.18 0.10 0.10  | 0.00 0.00 0.00 27.01 8.88 17.02 24.45 8.89 11.56 1.92 99.74 ACTOR NOT E LATER APP CO tpd 16.87 3.90 1.37 3.00 1.97 1.13 0.00 0.00 2.89 1.63 1.82 0.73      | 0.00 0.00 0.00 0.00 1.31 1.31 0.43 0.90 1.29 0.47 0.55 0.09  S.05  NOx tpd  0.82 0.15 0.07 0.15 0.10 0.05 0.00 0.00 0.15 0.00 0.01 0.01  | App<br>Fac<br>1000   | nty<br>ort.<br>ttor<br>0%                    | FAY<br>VOC tpd<br>6.25                  | 99.74  | NOX tpu                          |
|  | R MIN COLL R LOCAL U INTERST U FREEWAY U PRIN ART U MIN ART U COLL LOCAL RAMP  YEAR: COUNTY: SCENARIO: ROAD CLASS R INTERST R PRIN ART R MIN ART R MIN COLL R LOCAL U INTERST U FREEWAY U PRIN ART U FREEWAY U PRIN ART U FREEWAY U PRIN ART U MIN ART U MIN ART U MIN ART U COLL U COLL U COLL                               | \$peeds  54.1 54.1 49.9 47.6 53.8 38.4  34.1 32.5 30.5 | 50.5 28.0 20.6 21.0 12.9 34.6  2030 Scott  M6.2 Defaults  DVMT  2,126,486 234,192 177,235 394,841 246,832 142,519 0 419,459 236,428 236,428 91,716                              | 0<br>0<br>0<br>3,432,054<br>1,113,032<br>2,439,315<br>3,257,080<br>1,190,613<br>1,454,696<br>218,896<br><b>Mobile Mode</b><br><b>Mobile Mode</b><br>2,094,588<br>234,192<br>0<br>0<br>419,459<br>236,428<br>241,945<br>9<br>236,428<br>241,912<br>0<br>0 |          | 0.000 0.000 0.000 0.000 0.000 0.35 0.35   | 0.000 0.000 0.000 0.000 7.139 7.237 6.810 6.772 7.210 7.968  AA 44 5.089 7.252 7.210 7.487 20.260 6.241 6.246 6.252 7.210                           | 0.000 0.000 0.000 0.000 0.347 0.352 0.333 0.360 0.358 0.346 0.366 0.366 0.358 0.346 0.366 0.3595 0.344 0.339 0.354 0.366 0.363 0.363 0.323 0.327 0.346 | YTNUC         | 0.00 0.00 0.00 0.00 1.32 0.42 1.11 1.68 0.61 1.00 0.10 6.25  IONMENT FATOTALS ARI  VOC tpd  0.78 0.44 0.07 0.15 0.09 0.10 0.00 0.00 0.18 0.10 0.10  | 0.00 0.00 0.00 27.01 8.88 17.02 24.45 8.89 11.56 1.92 99.74 ACTOR NOT E LATER APP CO tpd 16.87 3.90 1.37 3.00 1.97 1.13 0.00 0.00 2.89 1.63 1.82 0.73      | 0.00 0.00 0.00 0.00 1.31 1.31 0.43 0.90 1.29 0.47 0.55 0.09  S.05  NOx tpd  0.82 0.15 0.07 0.15 0.10 0.05 0.00 0.00 0.15 0.00 0.01 0.01  | App<br>Fac<br>1000   | nty<br>ort.<br>ttor<br>0%                    | FAY<br>VOC tpo<br>6.25<br>SC<br>VOC tpo | OTT COUNT CO tpd   | NTY NOx tpc  5.09  NOx tpc  1.73 |
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|  | R MIN COLL R LOCAL U INTERST U FREEWAY U PRIN ART U MIN ART U COLL LOCAL RAMP  YEAR: COUNTY: SCENARIO: ROAD CLASS R INTERST R PRIN ART R MIN ART R MIN ART R MIN COLL R LOCAL U INTERST U FREEWAY U PRIN ART U FREEWAY U PRIN ART U MIN ART U COLL U COLL U LOCAL                     | \$peeds  54.1 54.1 49.9 47.6 53.8 38.4  34.1 32.5 30.5 | 50.5 28.0 20.6 21.0 12.9 34.6  2030 Scott M6.2 Defaults DVMT  2,126,486 234,192 177,235 394,841 246,832 142,519 0 0 419,459 236,428 264,412 91,716                              | 0<br>0<br>3,432,054<br>1,113,032<br>2,439,315<br>3,257,080<br>1,190,613<br>1,454,696<br>218,896<br>Mobile Mode<br>20,94,588<br>234,192<br>177,235<br>394,841<br>246,832<br>142,519<br>0<br>0<br>419,459<br>236,428<br>264,412<br>91,716<br>31,897        |          | 0.000 0.000 0.000 0.000 0.000 0.35 0.35   | 0.000 0.000 0.000 0.000 7.139 7.237 6.810 6.772 7.210 7.968  AA 44 5.089 7.252 7.210 7.487 20.260 6.241 6.246 6.252 7.210                           | 0.000 0.000 0.000 0.000 0.347 0.352 0.333 0.360 0.358 0.346 0.366 0.366 0.358 0.346 0.366 0.3595 0.344 0.339 0.354 0.366 0.363 0.363 0.323 0.327 0.346 | YTNUC         | 0.00 0.00 0.00 0.00 1.32 0.42 1.11 1.68 0.61 1.00 0.10 6.25 IONMENT F/ TOTALS ARI 0.07 0.15 0.09 0.10 0.00 0.00 0.10                                | 0.00 0.00 0.00 0.00 27.01 8.88 17.02 24.45 8.89 11.56 1.92 99.74 ACTOR NOT E LATER API CO tpd 16.87 3.90 1.37 3.00 0.00 0.00 2.89 1.63 1.82 0.73 0.28      | 0.00 0.00 0.00 1.31 0.43 0.90 1.55 0.09 5.05  REFLECTED PORTIONED)  NOX tpd  0.82 0.15 0.07 0.15 0.00 0.00 0.00 0.00 0.015 0.08 0.10 0.03 0.01   | App Face             | nty<br>ort.<br>ttor<br>0%                    | FAY VOC tpd  6.25  VOC tpd  2.10        | COTT COUNT C | NTY S.08  NTY NOx tpc  1.72      |
|  | R MIN COLL R LOCAL U INTERST U FREEWAY U PRIN ART U MIN ART U COLL LOCAL RAMP  YEAR: COUNTY: SCENARIO: ROAD CLASS R INTERST R PRIN ART R MIN ART R MIN ART R MIN COLL R LOCAL U INTERST U FREEWAY U PRIN ART U FREEWAY U PRIN ART U MIN ART U COLL U COLL U LOCAL                     | \$peeds  54.1 54.1 49.9 47.6 53.8 38.4  34.1 32.5 30.5 | 50.5 28.0 20.6 21.0 12.9 34.6  2030 Scott M6.2 Defaults DVMT  2,126,486 234,192 177,235 394,841 246,832 142,519 0 0 419,459 236,428 264,412 91,716                              | 0<br>0<br>3,432,054<br>1,113,032<br>2,439,315<br>3,257,080<br>1,190,613<br>1,454,696<br>218,896<br>Mobile Mode<br>20,94,588<br>234,192<br>177,235<br>394,841<br>246,832<br>142,519<br>0<br>0<br>419,459<br>236,428<br>264,412<br>91,716<br>31,897        |          | 0.000 0.000 0.000 0.000 0.000 0.35 0.35   | 0.000 0.000 0.000 0.000 7.139 7.237 6.810 6.772 7.210 7.968  AA 44 5.089 7.252 7.210 7.487 20.260 6.241 6.246 6.252 7.210                           | 0.000 0.000 0.000 0.000 0.347 0.352 0.333 0.360 0.358 0.346 0.366 0.366 0.358 0.346 0.366 0.3595 0.344 0.339 0.354 0.366 0.363 0.363 0.323 0.327 0.346 | YTNUC         | 0.00 0.00 0.00 0.00 1.32 0.42 1.11 1.68 0.61 1.00 0.10 6.25 IONMENT F/ TOTALS ARI 0.07 0.15 0.09 0.10 0.00 0.00 0.10                                | 0.00 0.00 0.00 0.00 27.01 8.88 17.02 24.45 8.89 11.56 1.92 99.74 ACTOR NOT E LATER API CO tpd 16.87 3.90 1.37 3.00 0.00 0.00 2.89 1.63 1.82 0.73 0.28      | 0.00 0.00 0.00 1.31 0.43 0.90 1.55 0.09 5.05  REFLECTED PORTIONED)  NOX tpd  0.82 0.15 0.07 0.15 0.00 0.00 0.00 0.00 0.015 0.08 0.10 0.03 0.01   | App Face             | nty ort.                                     | SC VOC tpc                              | OTT COUNT CO tpd  35.59  CONGROUND ACCOUNT CO tpd  | NTY NOx tpc  5.08  NTY NOx tpc   |

# **CHAPTER 6 – AIR QUALITY**

\*Note: Hard copies of the Fayette Co. Mobile 6 emissions factoring model output files for all the plan years can be obtained upon request, by contacting the Division of Planning, Transportation Planning Section, 200 East Main Street, Lexington Kentucky, 40507, phone # 859-258-3180.

This concludes the Air Quality Chapter of the Year 2030 Long Range Transportation Plan.

# APPENDIX 1 TPC RESOLUTION APPROVING 2030 PLAN & 2005 TIP

# RESOLUTION OF THE POLICY COMMITTEE OF THE LEXINGTON AREA METROPOLITAN PLANNING ORGANIZATION REAFFIRMING THE APPROVAL OF THE 2030 TRANSPORTATION PLAN AND THE 2005 – 2008 TRANSPORTATION IMPROVEMENT PROGRAM

**WHEREAS**, Section 134, Title 23, USC requires a continuing comprehensive transportation planning process be carried on cooperatively in areas of more than 50,000 population and that the urban transportation planning process shall include development of a 20 year, fiscally balanced plan of transportation improvement projects; and

**WHEREAS**, the Transportation Policy Committee (TPC) is the official decision making body of the Lexington Area Metropolitan Planning Organization (MPO), and is responsible for developing a Transportation Plan, and the Lexington-Fayette Urban County Government is the officially designated MPO staff for the Lexington Urbanized Area; and

**WHEREAS**, the 2030 Long Range Transportation Plan and the 2005 – 2008 Transportation Improvement Program (TIP) was developed by the Lexington Area MPO and reviewed by the Kentucky Transportation Cabinet and appropriate local officials; and

WHEREAS, the transportation planning process is being carried on in conformance with all Federal requirements and has been so certified; and

**WHEREAS**, the Lexington Urbanized Area has been found to be a "Maintenance" Non-Attainment Area for Ozone Pollutants; and

WHEREAS, Section 176 (c) (3) of the 1990 Clean Air Act Amendments requires that the MPO make a determination that the Transportation Plan and the TIP for the Lexington Urbanized Area is in conformity with respect to the Kentucky State Implementation Plan (SIP) for attainment of the National Ambient Air Quality Standards (NAAQS); and

**THEREFORE BE IT RESOLVED**, that the MPO Policy Committee, at its regular public meeting of June 4, 2004, reaffirms and approves the 2030 Long Range Transportation Plan and the 2005 – 2008 TIP for the Lexington Urbanized Area and determines there is conformity between the 2030 Long Range Transportation Plan and the 2005 - 2008 TIP and the Kentucky SIP for the attainment of the NAAQS.

The MPO assures that the 2030 Long Range Transportation Plan and the 2005 - 2008 TIP contains no goals, directives, recommendations, or projects, which contradict any requirements or commitments of the Kentucky SIP.

The Kentucky SIP currently does not identify any Transportation Control Measures (TCMs) for the Lexington Urbanized Area. As the SIP is revised, however, responding to the 1990 Clean Air Act Amendments, and TCMs are identified as necessary for the Lexington Urbanized area, the MPO Policy Committee certifies that the  $2030 \ Long \ Range \ Transportation \ Plan$  and the  $2005 - 2008 \ TIP$  shall be amended to ensure the expeditious implementation of these TCMs.

| Mayor Teresa Ann Isaac, Chairperson | -<br> |  |
|-------------------------------------|-------|--|
| Lexington, Kentucky                 | Date  |  |
|                                     |       |  |
| Maxwell C. Bailey, Secretary        | Date  |  |
| Kentucky Transportation Cabinet     |       |  |
| Commonwealth of Kentucky            |       |  |

# **APPENDIX 2**

# MPO COMMITTEE MEMBERSHIP LISTS

# TRANSPORTATION POLICY COMMITTEE (TPC):

#### Teresa Isaac, Mayor (CHAIR)

LFUCG 200 E. Main St. Lexington, KY 40507

#### William Neal Cassity, Hon. Jessamine County Judge/Executive

Jessamine County Courthouse 101 N. Main St. Nicholasville, KY 40356

#### Michael W. Hancock, P.E. KY Transportation Cabinet

KY Transportation Cabinet 200 Mero St., 6<sup>th</sup> Floor Frankfort, KY 40622

#### John Martin, Mayor City of Nicholasville

Nicholasville City Hall 517 N. Main St. Nicholasville, KY 40356

#### Chuck Ellinger II UC Council

UC Council Office 200 E. Main St. Lexington, KY 40507

# **Non-Voting Members**

# Henrika Buchanan-Smith FTA

FTA Region IV 61 Forsyth St., SW – Ste. 17 T50 Atlanta, GA 30303-8917

# Fred V. Brown UC Council, 8th District

UC Council, 8th District 200 E. Main St. Lexington, KY 40507

#### Gloria Martin UC Council, 12th District

UC Council, 12th District 200 E. Main St. Lexington, KY 40507

#### Wanita Sipe Elison UC Council, 6th District

UC Council, 6th District 200 E. Main St. Lexington, KY 40507

#### Paul Brooks UC Council, 11th District

UC Council, 11th District 200 E. Main St. Lexington, KY 40507

#### Dr. David B. Stevens UC Council

UC Council Office 200 E. Main St. Lexington, KY 40507

#### Glenn Jilek FHWA

FHWA Kentucky Division Office 330 W. Broadway Frankfort, KY 40601

#### Harold Rainwater, Hon. Mayor of Wilmore

City of Wilmore 335 E. Main St. Wilmore, KY 40390

#### Sandra Varellas, Hon. Fayette County Judge/Executive

Fayette County Judge/Executive 167 W. Main St. Lexington, KY 40507

#### Terry Garcia Crews, Director LexTran

LexTran 109 West Loudon Ave. Lexington, KY 40508

# Mike Scanlon, Vice Mayor UC Council

UC Council Office 200 E. Main St. Lexington, KY 40507

## TRANSPORTATION TECHNICAL COORDINATING COMMITTEE (TTCC):

#### Greg Bohnett, Planning Administrator City of Nicholasville (CHAIR)

City of Nicholasville 517 N. Main St. Nicholasville, KY 40356

#### David Leddy, Sgt. Division of Police (VICE CHAIR)

LFUCG Division of Police 150 E. Main St. Lexington, KY 40507

#### Steve Austin Bluegrass Tomorrow

Bluegrass Tomorrow 465 E. High St, #208 Lexington, KY 405071941

#### Doraine Bailey Health Department

LFUCG Health Department 650 Newtown Pike Lexington, KY 40508

#### William Bowie Division of Engineering

LFUCG Division of Engineering 200 E. Main St. Lexington, KY 40507

#### Ed Brady WHEELS

WHEELS 1450 Newtown Pike Lexington, KY 40511

#### John Gowins, Env. Control Supervisor Division of Air Quality

KY Division for Air Quality 803 Schenkel Lane Frankfort, KY 40601

#### Stewart Kearns UK Parking & Trans. Services

UK Parking & Transportation Services 409 S. Limestone Lexington, KY 405060202

#### Jeanne Gardener Traffic Engineering

LFUCG Traffic Engineering 200 E. Main St. Lexington, KY 40507

#### Charlie Milward Chief Administrator's Office

LFUCG Chief Administrator's Office 200 E. Main St., 12<sup>th</sup> Floor Lexington, KY 40507

## Jolena Childers AAA Bluegrass Lexington

AAA Bluegrass Lexington PO Box 1581 Lexington, KY 40507

#### Julian Beard, Director Mayor's Office of Economic Dev.

LFUCG Mayor's Office 200 E. Main St. Lexington, KY 40507

#### Bruce Duncan Bluegrass ADD

699 Perimeter Dr. Lexington, KY 40517

#### Robert Bayert Division of Engineering

LFUCG Division of Engineering 200 E. Main St. Lexington, KY 40507

#### John Slone Bluegrass Airport

Bluegrass Airport 4000 Versailles Road Lexington, KY 40510

#### Gina Hampton Lexington United

Lexington United 330 E. Main St., Suite 205 Lexington, KY 40507

#### Betty Taylor Jessamine County Planning Commission

Jessamine County Planning Commission 103 N. Main St. Nicholasville, KY 40356

#### Doug Trulock United Transportation, Inc.

United Transportation, Inc. PO Box 1019 Lexington, KY 40588-1019

#### Glenn Jilek FHWA

FHWA Kentucky Division Office 330 W. Broadway Frankfort, KY 40601

#### Paula King Div. of Community Development

LFUCG Div. of Community Dev. 200 E. Main St. Lexington, KY 40507

#### John Kiser Favette County Public Schools

Fayette County Public Schools 701 E. Main St. Lexington, KY 40502

#### Mike Ridenour Lexington Chamber of Commerce

Lexington Chamber of Commerce PO Box 781 Lexington, KY 405070781

## Terry Garcia Crews, Director LexTran

LexTran 109 W. Loudon Ave. Lexington, KY 40508

#### Charles Schaub KYTC Multimodal Programs

New State Office Bldg. 200 Mero St., 5<sup>th</sup> Floor Frankfort, KY 40622

# Pam Shepherd FTSB

FTSB 694 New Circle Road NE, Suite 33 Lexington, KY 40505

#### William McKinney UC Council Office

UC Council Office 200 E. Main St. Lexington, KY 40507

#### Stuart Goodpaster KY Transportation Cabinet

KYTC District Highway Office 7 District Office 7, PO Box 11127 Lexington, KY 40512-1127

## **CONGESTION MANAGEMENT COMMITTEE (CMC):**

## Marc Guindon (CHAIR) Division of Planning

LFUCG Division of Planning 200 E. Main St. Lexington, KY 40507

#### Greg Bohnett, Planning Administrator City of Nicholasville

City of Nicholasville 517 N. Main St. Nicholasville, KY 40356

#### Mike Stevens KY Transportation Cabinet

District Highway Office 7 P.O. Box 11127 Lexington, KY 40512

#### Milton Dohoney, CAO Chief Administrator's Office

LFUCG Chief Administrator's Office 200 E. Main St., 12<sup>th</sup> Floor Lexington, KY 40507

#### Stuart Goodpaster KY Transportation Cabinet

KYTC District Highway Office 7 PO Box 11127 Lexington, KY 40512

#### Terry Garcia Crews LexTran

LexTran 109 W. Loudon Ave. Lexington, KY 40508

## Charles Schaub KYTC Multimodal Programs

New State Office Bldg. 200 Mero St., 5<sup>th</sup> Floor Frankfort, KY 40622

#### Max Conyers Division of Planning

LFUCG Division of Planning 200 E. Main St., 10th Floor Lexington, KY 40507

#### Robert Bayert Division of Engineering

LFUCG Division of Engineering 200 E. Main St. Lexington, KY 40507

#### Don Hartman Program Manager of IVHS

University of Kentucky 176 CU/KTC Building Lexington, KY 405060281

#### Chris King, Director Division of Planning

LFUCG Division of Planning 200 E. Main St. Lexington, KY 40507

#### Betty Taylor Jessamine County Planning Comm.

Jessamine County Planning Comm. 103 N. Main St. Nicholasville, KY 40356

#### Glenn Jilek FHWA

FHWA Kentucky Division Office 330 W. Broadway Frankfort, KY 40601

#### David Leddy, Sgt. Division of Police

LFUCG Division of Police 150 E. Main St. Lexington, KY 40507

#### David Schaars Division of Planning

LFUCG Division of Planning 200 E. Main St., 10<sup>th</sup> Floor Lexington, KY 40507

#### Julie Shaw Division of Police

LFUCG Division of Police 150 E. Main St. Lexington, KY 40517

#### Joel Weber Traffic Engineering

LFUCG Traffic Engineering 200 E. Main St. Lexington, KY 40507

## **INCIDENT MANAGEMENT COMMITTEE (IMC):**

#### Ron Herrington (CHAIR) Traffic Engineering

LFUCG Traffic Engineering 200 E. Main St. Lexington, KY 40507

#### Ken Agent KY Transportation Center

University of Kentucky 176 CE/KTC Bldg. Lexington, KY 405060281

#### Ed Burtner, City Manager City of Winchester

City of Winchester PO Box 40 Winchester, KY 40392

#### Billy Burton, Asst. Chief Division of Police

LFUCG Division of Police 150 E. Main St. Lexington, KY 40507

## Bruce Duncan Bluegrass ADD

699 Perimeter Dr. Lexington, KY 40517

#### Darlene Easterwood Public Information

LFUCG Division of Public Information 200 E. Main St., First Floor Lexington, KY 40507

#### Marc Guindon Division of Planning

LFUCG Division of Planning 200 E. Main St. Lexington, KY 40507

#### Larry Irish KYTC Department of Highways

KYTC - Division of Traffic 501 High St., Room 105 Frankfort, KY 40622

#### David Lucas Computer Services

LFUCG Div. of Computer Services 200 E. Main St., 7th floor Lexington, KY 40507

#### George Lusby, Hon. Scott County Judge/Executive

Scott County Judge/Executive PO Box 973 Georgetown, KY 40324

#### Robert McCool KY Injury Prevention & Research

333 Waller Ave., Suite 202 Lexington, KY 405042915

## Ron McElhose LexTran

LexTran 109 W. Loudon Ave. Lexington, KY 40508

## **INCIDENT MANAGEMENT COMMITTEE (IMC) cont.:**

#### Terry Chism FHWA - KY Division Office

FHWA - KY Division Office 330 W. Broadway Frankfort, KY 40601

#### Simon Cornett KYTC Department of Highways

KYTC Division of Traffic 501 High St., Room 105 Frankfort, KY 40601

#### Steve Cummins Traffic Engineering

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#### Brian Dennis Traffic Engineering

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#### Terry Garcia Crews LexTran

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#### Charles Schaub KYTC Multimodal Programs

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#### Frank Watts, Hon. Woodford County Judge/Executive

Woodford County Judge/Executive 103 S. Main St., Rm. 200 Versailles, KY 40383

#### Glenn Jilek FHWA

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#### Dion LeMieux DEEM

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## Janet Whitaker Kentucky Educational Television

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# Leo McMillen Division of Streets and Roads

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#### Larry McMurray KYTC

KYTC District Highway Office 7 PO Box 11127 Lexington, KY 405121127

#### Ray Ochs Traffic Safety Institute

Eastern Kentucky University 253 Stratton Building Richmond, KY 40475

#### Jerry Pigman KY Transportation Center

University of Kentucky 176 CE/KYTC Bldg. Lexington, KY 405060281

#### Logan Wiler DES

DES Area 13 Office P.O. Box 4288 Lexington, KY 40544

## Andy Terwilleger Traffic Engineering

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#### Stuart Goodpaster KY Transportation Cabinet

KYTC District Highway Office 7 PO Box 11127 Lexington, KY 40512

## **APPENDIX 2 - MPO COMMITTEE MEMBERSHIP LISTS**

## AIR QUALITY ADVISORY COMMITTEE (AQAC):

David Schaars LFUCG Division of Planning

200 E. Main St., 10<sup>th</sup> Floor Lexington, KY 40507

Renee Williams LFUCG Public Information

LFUCG Public Information 200 E. Main St. Lexington, KY 40507

Bernadette DuPont FHWA

FHWA - KY Division Office 330 W. Broadway Frankfort, KY 40601

La Vaughn Brown FTSR

694 New Circle Rd. NE, Suite 33 Lexington, KY 40505

Annie Adams Environmental Health

Lexington Health Dept. 333 Waller Ave. Lexington, KY 40504

Jesse Mayes

**KYTC Multimodal Programs** 

200 ro St., 5<sup>th</sup> Floor Frankfort, KY 40622

Sudhir Palle

KY Transportation Center KY Transportation Center, U. of KY 176 Raymond Building Lexington, KY 40506-0281 Roger Daman LFUCG Division of Planning

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Sharalee Scanlon Ad Success, Inc.

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Pam Shepherd FTSR

694 New Circle Rd NE, Suite 33 Lexington, KY 40505

**Shelley Roberts LFUCG DEEM** 

166 N. Martin Luther King Blvd. Lexington, KY 40507

Susan Weaver

Division of Air Quality KYTC Division of Air Quality 803 Schenkel Lane Frankfort, KY 40601

Mike Ridenour

**Lexington Chamber of Commerce** PO Box 781

PO Box /81

Lexington, KY 40507-0781

Jenny Williams LexTran

109 W. Loudon Ave Lexington, KY 40508

Tom Webb

LFUCG Risk Management

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Lexington, KY 40507

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Beth Sweeney

LFUCG Traffic Engineering

200 E. Main St. Lexington, KY 40507

Leann True Norton Ad Success, Inc.

121 Prosperous Pl., Town Office 2 Lexington, KY 40509

Charles Mehanna

Kentucky Utilities One Quality St. Lexington, KY 40507

Sandra B. Conner Community Nursing Lexington Health Dept. 216 Newtown Pike

Lexington, KY 40508

## **BICYCLE PEDESTRIAN ADVISORY COMMITTEE (BPAC):**

Doraine Bailey (CHAIR) Health Department

LFUCG Health Department 650 Newtown Pike Lexington, KY 40508

Cindy Deitz Division of Planning

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Dexter Porter Talbott Neighborhood Assoc.

Talbott Neighborhood Assoc. 105 Hager Court Wilmore, KY 40390 Rob Hammons Division of Planning

LFUCG Division of Planning 200 E. Main St., 10<sup>th</sup> Floor Lexington, KY 40507

Keith Lovan Division of Engineering

LFUCG Division of Engineering 200 E. Main St., 8<sup>th</sup> Floor Lexington, KY 40507

Roger Daman Division of Planning

LFUCG Division of Planning 200 E. Main St., 10<sup>th</sup> Floor Lexington, KY 40507 Charles Schaub KYTC Multimodal Programs

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Joel Weber Traffic Engineering

LFUCG Traffic Engineering 200 E. Main St. Lexington, KY 40507

## **APPENDIX 3**

## PUBLIC INVOLVEMENT PROGRAM

#### PUBLIC INVOLVEMENT PROGRAM

The public involvement program for the update of the Long Range Transportation Plan represents an extensive effort. General guidelines for this process were established in the Public Participation Plan, adopted by the Transportation Policy Committee in September 1994. This process allows the MPO to strengthen the 2030 Plan by considering not only technical analysis but also community and cultural values and concerns. In this way a balance can be achieved between moving vehicles efficiently and preserving the quality of life.

Input for this plan was derived from many sources and involved coordination with other plans being developed. Transportation issues were discussed at meetings for these related planning efforts, with public comment considered for the Transportation Plan as well. Staff involvement in related planning efforts is briefly described in Chapter One.

Improving the public participation effort is an on-going process. The goal of the MPO is to improve opportunities for public input and to find more effective means of informing citizens. A key element in this effort has been the distribution of a quarterly newsletter on local transportation issues. The MPO Web Site continues to be improved, offering information about Transportation planning and providing opportunities for public input. The site is intended to increase public access to transportation planning documents, the quarterly newsletter, MPO meeting schedules, and other related information.

#### **ENVIRONMENTAL JUSTICE**

A critical concern in developing the long-range transportation plan must be the equitable distribution of services, facilities and resources within the community. This should be with regard to income, race, and other socioeconomic factors, in addition to geographic distribution. The 2000 Census data for income and race were mapped for reference in this effort (Figures 4.22 and 4.23).

As part of the effort to ensure environmental justice, the MPO has worked hard to include members of the minority community and low-income groups in the decision-making process. The Year 2000 Census found that 13.4 % of the Fayette County population was African American, 3.3% Hispanic and 2.5% Asian. The most significant change since 1990 has been the growth of the Hispanic population. Contacts in the minority community as well as media serving these groups are included in all public participation notification. Similarly, the MPO strives to include the elderly and disabled population in planning efforts, as well as residents of both Fayette and Jessamine Counties. Input from all segments of the population and all neighborhoods in the community are critical to effective transportation planning.

## YEAR 2030 TRANSPORTATION PLAN PUBLIC MEETINGS

a. **Notification** - In addition to the legal advertisements, media notification, and notice on government access channel 3, notices on public meetings for the plan update were sent to all known neighborhood associations in Fayette and Jessamine Counties, and other interested citizens and organizations. This encouraged additional public input to this important planning process. An e-mail distribution list was also used for notification purposes. Legal notices were published at least one week prior to meeting dates in the Lexington Herald-Leader and the Jessamine Journal. The media notification list utilized by the Public Information Office included contacts representing the under-served population. The Division of Planning maintains the media list and neighborhood association list. The quarterly MPO newsletter (*Conveyance*) reported on activities and progress related to the development of the plan. This newsletter was initiated in the spring of 1996 and is distributed to all neighborhood associations, the media, interested individuals, and people involved in MPO related committees. The newsletter includes

articles on transportation issues and a calendar of upcoming transportation meetings. The LFUCG website and use of GTV3 for interviews and Public Service Announcements were other significant means of notifying the public.

- b. **Meetings** Public meetings were held at critical stages in the planning process. The hearings were held at locations in Fayette County and Jessamine County to ensure that input was received from the entire transportation study area. The first stage of public meetings occurred in September 2003, and focused on the Plan Goals and Objectives, the transportation planning process, and the Bicycle Pedestrian Element of the Plan. Transportation plan alternatives meetings were held in January and February 2004. Public hearings on the recommended plan are scheduled for May 2004. A summary of the citizen comments received and minutes of the meetings were presented to the Transportation Policy Committee for consideration. The Division of Planning maintains summaries of comments received at these public meetings and also through mail and e-mail..
- c. **Review Opportunity** –Throughout the Plan Update process, the MPO staff strived to make plan materials available to the public. This effort included placing materials at key locations in the two-county area. This aspect of the public involvement effort is detailed below. Legal notices, the newsletter, media notification, and neighborhood association notification all noted the availability of materials for review and public input. In accordance with ADA regulations, all written materials were available in alternative formats upon request. The possible formats included regular print, large print, and audiocassette.

#### ELEMENTS OF PUBLIC PARTICIPATION PROCESS

## LEXINGTON AREA METROPOLITAN PLANNING ORGANIZATION

## **Notice/Advertising**

- Herald-Leader legal
- Jessamine Journal legal
- Notices to Neighborhood Associations
- Notices to interested parties/participants
- Government Access Channel 3 calendar
- Government Access Channel 3 ad
- "Conveyance" Quarterly MPO newsletter
- LFUCG website

## **Participants**

- Fayette County Neighborhood Associations
- Jessamine County Neighborhood Associations
- Media
- Transportation Policy Committee
- Transportation Technical Coordinating Committee
- Bicycle-Pedestrian Advisory Committee
- Congestion Management Committee
- Minority Contacts
- Disabled Community Contacts
- Other Interested Parties

## **Documentation**

- comment sheets
- e-mail
- summary of all comments received
- meeting minutes

## **Public Meetings**

- Fayette County meeting
- Jessamine County meeting
- handout materials
- display maps
- comment sheets
- opportunity to make comments directly to secretary for record
- open-format meeting style: short general presentation, question and answer session, and opportunity for public to review materials and have "one on one" discussions with MPO staff.

## YEAR 2030 TRANSPORTATION PLAN Public Participation Outreach

## **MEDIA CONTACTS**

Lisa King Jessamine Journal Jessamine Co. newspaper
Randy Patrick Jessamine Journal Jessamine Co. newspaper
Don Cordray Community Voice African-American newspaper

Margaret Chase WUKY – Radio Eye disabled radio

## AGENCY / ORGANIZATION CONTACTS

WHEELS Ed Brady disabled / elderly transport. **Opal Spencer** Blue Brass Council for the Blind disabled transport. P.G. Peoples Urban League African-American African American Forum John Cole African-American Brenda Farris Senior Citizens Center elderly Ben Figueras Hispanic Hispanic Association

Ben Figueras Hispanic Association Hispanic Vacant Coord. Of Immigration Services Hispanic

## JESSAMINE COUNTY OFFICIALS

Hon. Neal Cassity
Hon. John Martin
Jessamine Co. Judge Executive
Mayor, City of Nicholasville

Greg Bohnett Planning Administrator, City of Nicholasville

Jesse Jackson Jessamine County Courthouse

Hon. Harold Rainwater Mayor, Wilmore

Date

**Meetings** 

## PUBLIC PARTICIPATION PROCESS

Location

## 2030 TRANSPORTATION PLAN – PUBLIC PARTICIPATION ACTIVITIES

|          | <del></del>                          |                                   |
|----------|--------------------------------------|-----------------------------------|
| 04/10/03 | MPO 2030 Plan Consultation Meeting   | 10 <sup>th</sup> fl. LFUCG Build. |
| 04/16/03 | TIP Public Hearing                   | Withers Lib. – Nich.              |
| 04/17/03 | TIP Public Hearing                   | Lex. Downtown Lib.                |
| 04/23/03 | TPC adopts Public Participation Plan | LFUCG Council Chamber             |
| 04/23/03 | TPC adopts 2004 United Work Program  | LFUCG Council Chamber             |
| 08/24/03 | TPC adopts 2004 – 2007 TIP           | LFUCG Council Chamber             |

| 09/09/03 | 2030 Plan Public Hearing Goals & Objectives | Lex. Downtown Lib.                |
|----------|---|-----------------------------------|
| 09/11/03 | 2030 Plan Public Hearing Goals & Objectives | Jess. C of Commerce               |
| 10/29/04 | TPC adopts Plan Goals & Objectives          | Jess. Co. Court House             |
| 02/18/04 | MPO 2030 Plan Consultation Meeting          | 10 <sup>th</sup> fl. LFUCG Build. |
| 09/09/03 | 2030 Plan Public Hearing Goals & Objectives | Lex. Downtown Lib.                |
| 09/11/03 | 2030 Plan Public Hearing Goals & Objectives | Jess. C of Commerce               |
| 01/27/04 | 2030 Plan Public Hearing Alternatives       | Lex. Downtown Lib.                |
| 02/03/04 | 2030 Plan Public Hearing Alternatives       | Jess. C of Commerce               |
| 04/28/04 | TPC adopts 2030 Transportation Plan         | LFUCG Council Chamber             |
| 05/25/04 | 2030 Plan & 2005 TIP Public Hearing         | Lex. Downtown Lib.                |
| 05/27/04 | 2030 Plan & 2005 TIP Public Hearing         | Jess. C of Commerce               |

# PUBLIC PARTICIPATION QUESTIONNAIRE

Summary of Written Comments
(September 2002 survey for Public Participation Plan update)

| HIGHWAY/ROAD   | <u>ID</u> |
|--|-----------|
| Road specific comments   |           |
| • concern re: impact of Liberty Rd. widening on neighborhood                           | O         |
| • concern re: impact of road projects on property                                      | JR        |
| • improved design/visual impact of road improvements like Paris Pike                   | FR        |
| <ul> <li>cited Reynolds Rd. roundabout and Clays Mill as examples of road</li> </ul>   |           |
| projects where citizen input has been important  | FNA       |
| • Wilmore improvements(Rt. 29, US 68)  | JR        |
| <ul> <li>Continue US 68 improvements through Jessamine Co.</li> </ul>                  | JR        |
| <ul> <li>interest in US 68 in Jessamine County</li> </ul>                              | JC        |
| <ul> <li>Put in reversible lanes on Harrodsburg Rd.</li> </ul>                         | FC        |
| <ul> <li>Concern for New Circle Road planning</li> </ul>                               | FC        |
| <ul> <li>Negative comments on Man o'War</li> </ul>                                     | FC        |
| <ul> <li>Man o'War inadequate facility</li> </ul>                                      | FC        |
| <ul> <li>Concern re: Man o'War Blvd.</li> </ul>  | FC        |
| <ul> <li>Positive comments on Bryan Station upgrades</li> </ul>                        | FC        |
| <ul> <li>Positive comments on Bryan Station widening</li> </ul>                        | FC        |
| <ul> <li>Positive comments on widening US 27 from Camp Nelson to</li> </ul>            |           |
| Nicholasville  | JR        |
| <ul> <li>Negative comments on possibility of 12-lanes for Nicholasville Rd.</li> </ul> | FC        |
| <ul> <li>Positive comments on redesign of Nicholasville/Limestone</li> </ul>           | FC        |
| <ul> <li>reversible lanes on Nicholasville Rd. lessens travel time to work</li> </ul>  | FC        |
| <ul> <li>positive comments on additional lanes at Reynolds Rd Nicholasville</li> </ul> | FC        |
| <ul> <li>Positive comments on connection from Winchester Rd. to Hamburg</li> </ul>     | FC        |
| <ul> <li>Negative comments on New Circle Rd. – Versailles to Newtown</li> </ul>        | FC        |
| <ul> <li>Positive comments on US 127 improvements</li> </ul>                           | FC        |
| <ul> <li>Positive comments on Russell Cave improvements</li> </ul>                     | FC        |
| <ul> <li>Incomplete job on McCall's Road causes problems when it rains</li> </ul>      | FC        |
| <ul> <li>Positive comments on Paris Pike widening</li> </ul>                           | FC        |
| <ul> <li>Impacted by Henry Clay Bridge project</li> </ul>                              | FC        |
| <ul> <li>negative comments re: Reynolds Rd. construction and round-about</li> </ul>    | FC        |

| •      | Reynolds Rd. improvements were reasonable compromise, but took a lot of citizen effort   | FNA |
|--------|--|-----|
| •      | citizen divisiveness in Clays Mill Rd. project   | FNA |
| •      | negative comments re: widening Clays Mill Rd.  | FC  |
| Signal | ization comments   |     |
| •      | Concern for signal timing on Winchester/Fortune/Eastland   | FC  |
| •      | Timing of traffic signals needs work   | FC  |
| •      | Poor light synchronization in Lexington  | FC  |
| •      | Positive comments on New Circle Rd. light changes  | FC  |
| Safety |  |     |
| •      | Concerns with number of accidents on US 68   | JR  |
| •      | interest in meetings on highway safety and hazards   | JR  |
| •      | Negative comments re: signalization at seldom used intersections   | FC  |
| •      | Concern for signal timing on N.E. New Circle   | FC  |
| Other  |  |     |
| •      | interest in looking at alternatives for road projects  | FC  |
| •      | Provide access from I-75 to Nicholasville  | JR  |
| •      | Interested in projects affecting Wilmore   | JR  |
| •      | More, and better roads in Jessamine Co.  | JR  |
| •      | Road improvements can improve mobility in Lexington  | FC  |
| •      | Most projects only respond to immediate/current problems   | FC  |
| •      | developers of projects causing increased traffic should pay more for   |     |
|        | the cost of road improvements  | FC  |
| •      | access roads can result in smoother traffic flow   | JR  |
| •      | Maximize use of existing infrastructure; minimize need for new roads need road improvements to get to shopping centers, friends' homes | FC  |
| •      | and Habitat For Humanity building sites  | FC  |
| •      | Flexibility in planning and building facilities in order to take timely  | I C |
| •      | advantage of opportunities   | FC  |
| •      | Interstate system provides increased mobility for Lexington  | FC  |
| •      | Interstate system is major improvement to highway system   | FC  |
| •      | Negative comments on destruction of mature trees for road widenings  | 1.0 |
| •      | and the minimal post-construction landscaping  | FC  |

## PUBLIC TRANSPORTATION

| T   |   | <b>-</b> |     | •    |
|-----|---|----------|-----|------|
| - 1 | Y | ran      | ser | VICE |

| <ul> <li>more transit funding needed</li> <li>importance of public transportation</li> <li>need for more public transportation</li> <li>need to improve public transportation</li> <li>15 minute frequency for LexTran buses suggested</li> <li>improve LexTran system</li> <li>significantly upgrade public transportation</li> <li>general complaint about LexTran service quality</li> <li>Public transportation needs to be readily available</li> <li>Social service agency clients are affected by transit system</li> <li>concern for Leestown Route and schedule</li> <li>complaint re: Leestown Route schedule</li> <li>positive re: 25 cent reduced fare</li> <li>positive re: 25 cent reduced fare/urge continuation</li> <li>investigate local tax break for bus use</li> <li>consider trolley system like Louisville has</li> <li>consider use of smaller buses</li> <li>need for public transportation on Chinoe Road</li> <li>bus route needed on Waller Ave.</li> </ul> | FR FC |
|---|---|
| <ul> <li>Passenger Rail</li> <li>Consider light rail system</li> <li>Interest in light rail to connect Lexington, Louisville and Cincinnati</li> <li>Rapid Transit System using abandoned railroad beds, and connecting local towns</li> </ul>  | FC<br>FC<br>FC                            |
| <ul> <li>Other</li> <li>cooperation between city buses and school system; enlarge LexTran system, eliminate school buses, give tokens to students riding LexTra</li> <li>buy smaller buses instead of large ones</li> <li>custodians need to clean buses at every downtown change-over, and buses cleaned inside and out weekly.</li> <li>complaint about Transit Center restrooms-cleanliness/graffiti</li> <li>WHEELS service rated "good"</li> </ul>   | an FC<br>FC<br>FC<br>FC<br>FC             |

## **BICYCLE**

## **Bike Lanes**

| • | positive – Euclid Ave. bike lanes                                | O  |
|---|--|----|
| • | bike lanes needed on Nicholasville from Southland to downtown    | FC |
| • | in favor of more bike lanes to help alleviate traffic congestion | FC |
| • | need bike lanes on all new construction                          | FC |

## Other

| • | need for bicycle friendly planning                              | FC  |
|---|---|-----|
| • | significantly upgrade bike facilities                           | FC  |
| • | safe biking for children to schools, libraries, parks, etc.     | FC  |
| • | address needs of bicyclists                                     | FC  |
| • | concerned with completion of Richmond Rd. bike corridor         | FNA |
| • | have ad campaign to encourage all commuters to "Share the Road" | FC  |

## **PEDESTRIAN**

| • | need for pedestrian friendly planning                        | FC |
|---|--|----|
| • | safe walking for children to schools, libraries, parks, etc. | FC |
| • | address needs of pedestrians                                 | FC |

## **PUBLIC PARTICIPATION**

## **Notification/Information**

| ncation/information   |     |
|---|-----|
| provide access to information on-line and e-mail comments   | O   |
| provide e-mail reminders of meetings                        | FNA |
| set up e-mail distribution list for meeting notices         | FC  |
| request e-mail distribution of newsletter                   | FC  |
| better use of internet and e-mail                           | FC  |
| use internet to provide information and receive feedback    | FC  |
| more use of internet  | FC  |
| provide meeting info. on lfucg website                      | FC  |
| put all plans on Ifucg website                              | FC  |
| not aware that there was a mailing list for newsletter      | FC  |
| request to be put on mailing .list                          | FC  |
| provide more advanced notice                                | FNA |
| need for advance notice of meetings                         | FC  |
| provide advance notice of meetings by mail                  | FC  |
| publish meeting schedules well in advance                   | FC  |
| publicize more  | FC  |
| keep people informed of when meetings are                   | FC  |
| need for better & timely advertisement of meetings          | FC  |
| request phone call of meeting time and day                  | FC  |
| publicize meetings well in advance                          | FC  |
| provide advance notice with agenda                          | JR  |
| broadcast calendar of meeting dates/times                   | JR  |
| post meeting times during newscasts                         | FC  |
| not aware of meeting times                                  | FC  |
| provide more information                                    | FR  |
| provide more information                                    | FR  |
| use direct notification                                     | FC  |
| use newsletters   | FC  |
| make information available at public places (ex. Libraries) | FC  |
| provide more information at various stages                  | JR  |
| make info. packets available before meetings                | FC  |

**Meeting sites/times** 

• provide info. on options available

• publish information in newspaper

• keep neighborhood associations informed of project status

| Meeting sites/times   |  |
|---|--|
| <ul> <li>work w/ existing forums (churches, Community Action, etc.)</li> </ul>  | O  |
| <ul> <li>hold meetings at facilities located on bus route</li> </ul>  | FC   |
| <ul> <li>hold meetings at different locations in community</li> </ul>   | FC   |
| offer meetings at different times and places  | FC   |
| <ul> <li>hold meetings on site of proposed transportation improvement</li> </ul>  |  |
|   | 0  |
| • quick in & out surveys at functions   |  |
| • don't hold meetings during the first 3 weeks of March   | FC   |
| <ul> <li>hold multiple meetings on same topic/different locations</li> </ul>  | FC   |
| <ul> <li>meetings after 8 to 5 work day, making it easer to attend</li> </ul>   | FR   |
| <ul> <li>lunchtime meetings downtown</li> </ul>   | FC   |
| <ul> <li>meetings in neighborhoods</li> </ul>   | FR   |
| <ul> <li>meetings closer to area affected</li> </ul>  | FC   |
| <ul> <li>simultaneous meetings at different places on different project</li> </ul>  |  |
| <ul> <li>hold meetings at convenient locations</li> </ul>   | FC   |
|   | JR   |
|   |  |
| hold meetings at sites with adequate parking  | FC   |
| <ul> <li>concern re: available parking for public meetings</li> </ul>   | FC   |
| <ul> <li>concern re: available parking for public meetings</li> </ul>   | FC   |
| <ul> <li>hold meetings in areas with adequate parking</li> </ul>  | FC   |
| <ul> <li>suggestion for Saturday meetings</li> </ul>  | FC   |
| <ul> <li>Specific "Other" Location suggestions</li> <li>Parks and Rec. areas</li> <li>Carnahan House</li> <li>Community centers</li> <li>Schools and churches in Athens</li> <li>Connie Griffith and Ballard Place</li> <li>UK area during daytime</li> <li>central Lexington location</li> <li>Southern Fayette Co. in evenings</li> <li>South Elkhorn Church</li> <li>Shopping Malls (Fayette and Hamburg)</li> <li>Branch libraries – Beaumont and Eagle Creek</li> <li>Eagle Creek Library</li> </ul> | FC<br>FC<br>FC<br>FC<br>FR<br>FC<br>FR<br>FC<br>FC<br>FC |
| <ul> <li>Public Input</li> <li>maximize public input</li> <li>allow written input</li> <li>need ability to comment and ask questions on website</li> <li>provide on-line comment info. on Ifucg home page</li> <li>use surveys for public participation</li> </ul> Lexington Area Metropolitan Planning Organization Year 2030 Transportation Plan Upon   | FC<br>FC<br>FC<br>O<br>FC                                |

JC

JR

FNA

| •            | survey a good idea   | FC   |
|--------------|--|--|
| •            | encourage written and internet comment   | FC   |
| •            | many people are uncomfortable stating their opinion in public  | FC   |
| •            | allow comments on a particular project to be mailed in during  |  |
|              | specified time period  | FC   |
| •            | early public involvement, followed by pro and con descriptions   |  |
|              | of alternatives and voting by public   | FC   |
| •            | make transportation planning relevant to citizen needs   | FC   |
| •            | continue thoughtful changes  | FC   |
| •            | listen to public opinion and make decisions based on that  | JC   |
| •            | believe and accept what citizens say   | FC   |
| •            | despite efforts to involve people early, many wait until end   | ED   |
|              | of planning process  | FR   |
| •            | education cited as the answer; how to achieve is the problem   | FR<br>FC   |
| •            | feeling that input doesn't matter  | FС   |
| •            | belief that meetings are only to fulfill govt. requirements<br>belief that decisions are already made before meetings occur  | FC<br>FC   |
| •            | belief that decisions are already made before meetings occur   | FC   |
| •            | belief that people making decisions don't represent the  | rc   |
| •            | people affected.   | FC   |
| •            | show that participation in public meetings is worthwhile   | FC   |
| •            | show that public participation DOES make a difference  | FC   |
|              | simplify public participation process  | FC   |
| •            | involve elderly and students in process  | FNA  |
| •            | make list of MPO members available to public   | JR   |
| •            | invite local reps. to "Wilmore affected" meetings (ex.US68)  | JR   |
| •            | no need to attend meetings on transportation issues – no complaints  | FC   |
| OTHER        |  |  |
| <u>OTHER</u> | concern with meetings being too lengthy  | FC   |
| •            | start meetings on time   | FC   |
| •            |  |  |
|              | interesting/innovative meetings  | FC   |
| •            | interesting/innovative meetings representatives should attend neighborhood meetings  | FC<br>FNA  |
| •            | representatives should attend neighborhood meetings provide transportation to meetings   |  |
| •            | representatives should attend neighborhood meetings  | FNA  |
| •            | representatives should attend neighborhood meetings provide transportation to meetings   | FNA<br>FC  |
| •            | representatives should attend neighborhood meetings provide transportation to meetings provide transportation to meetings if not on bus route  | FNA<br>FC<br>FC  |
| •            | representatives should attend neighborhood meetings provide transportation to meetings provide transportation to meetings if not on bus route let people know of bus routes to meeting sites   | FNA<br>FC<br>FC<br>FC                                      |
| •            | representatives should attend neighborhood meetings provide transportation to meetings provide transportation to meetings if not on bus route let people know of bus routes to meeting sites do the right thing; not what State or Federal bureaucrats think follow through on plans use countywide referendums to eliminate possible political  | FNA<br>FC<br>FC<br>FC<br>FC                                |
| •            | representatives should attend neighborhood meetings provide transportation to meetings provide transportation to meetings if not on bus route let people know of bus routes to meeting sites do the right thing; not what State or Federal bureaucrats think follow through on plans use countywide referendums to eliminate possible political bias in decisions  | FNA<br>FC<br>FC<br>FC<br>FC<br>FC                          |
| •            | representatives should attend neighborhood meetings provide transportation to meetings provide transportation to meetings if not on bus route let people know of bus routes to meeting sites do the right thing; not what State or Federal bureaucrats think follow through on plans use countywide referendums to eliminate possible political bias in decisions listen to Jessamine concerns-equal representation  | FNA<br>FC<br>FC<br>FC<br>FC<br>FC                          |
| •            | representatives should attend neighborhood meetings provide transportation to meetings provide transportation to meetings if not on bus route let people know of bus routes to meeting sites do the right thing; not what State or Federal bureaucrats think follow through on plans use countywide referendums to eliminate possible political bias in decisions listen to Jessamine concerns-equal representation be receptive to Jessamine needs  | FNA FC FC FC FC FC JR JR                                   |
| •            | representatives should attend neighborhood meetings provide transportation to meetings if not on bus route let people know of bus routes to meeting sites do the right thing; not what State or Federal bureaucrats think follow through on plans use countywide referendums to eliminate possible political bias in decisions listen to Jessamine concerns-equal representation be receptive to Jessamine needs make sure that meetings are productive  | FNA FC FC FC FC FC FC FC FR JR JR FNA                      |
| •            | representatives should attend neighborhood meetings provide transportation to meetings if not on bus route let people know of bus routes to meeting sites do the right thing; not what State or Federal bureaucrats think follow through on plans use countywide referendums to eliminate possible political bias in decisions listen to Jessamine concerns-equal representation be receptive to Jessamine needs make sure that meetings are productive meetings should start promptly, follow agenda & not drag on  | FNA FC FC FC FC JR JR                                      |
| •            | representatives should attend neighborhood meetings provide transportation to meetings if not on bus route let people know of bus routes to meeting sites do the right thing; not what State or Federal bureaucrats think follow through on plans use countywide referendums to eliminate possible political bias in decisions listen to Jessamine concerns-equal representation be receptive to Jessamine needs make sure that meetings are productive meetings should start promptly, follow agenda & not drag on discouraged with planning process- MPO chooses harmful   | FNA<br>FC<br>FC<br>FC<br>FC<br>FC<br>JR<br>JR<br>FNA<br>FC |
| •            | representatives should attend neighborhood meetings provide transportation to meetings if not on bus route let people know of bus routes to meeting sites do the right thing; not what State or Federal bureaucrats think follow through on plans use countywide referendums to eliminate possible political bias in decisions listen to Jessamine concerns-equal representation be receptive to Jessamine needs make sure that meetings are productive meetings should start promptly, follow agenda & not drag on discouraged with planning process- MPO chooses harmful and disruptive options for projects   | FNA FC FC FC FC FC FC FC FC FR JR JR FNA FC                |
| •            | representatives should attend neighborhood meetings provide transportation to meetings if not on bus route let people know of bus routes to meeting sites do the right thing; not what State or Federal bureaucrats think follow through on plans use countywide referendums to eliminate possible political bias in decisions listen to Jessamine concerns-equal representation be receptive to Jessamine needs make sure that meetings are productive meetings should start promptly, follow agenda & not drag on discouraged with planning process- MPO chooses harmful and disruptive options for projects use UK KY Transportation Center-electronic scoring system | FNA FC FC FC FC JR JR FNA FC FC                            |
| •            | representatives should attend neighborhood meetings provide transportation to meetings if not on bus route let people know of bus routes to meeting sites do the right thing; not what State or Federal bureaucrats think follow through on plans use countywide referendums to eliminate possible political bias in decisions listen to Jessamine concerns-equal representation be receptive to Jessamine needs make sure that meetings are productive meetings should start promptly, follow agenda & not drag on discouraged with planning process- MPO chooses harmful and disruptive options for projects   | FNA FC FC FC FC FC FC FC FC FR JR JR FNA FC                |

| • | more regional transportation planning/expand MPO                       | FR  |
|---|--|-----|
| • | include Woodford County/other counties                                 | O   |
| • | simplify process as much as possible                                   | FR  |
| • | explain to public - MPO responsibilities vs. others                    | O   |
| • | expressed doubt that competent people are doing the planning           | FC  |
| • | longer range planning and land purchase                                | JC  |
| • | frustrated with delay in implementation of projects                    | FNA |
| • | make Jess. Co. adhere to policies already on the books                 | JC  |
| • | transportation agencies - poor job of meeting environmental needs      | FC  |
| • | find alternatives to fossil-fueled transportation                      | FC  |
| • | de-emphasize use of private automobile                                 | FC  |
| • | make it tougher to get drivers license                                 | FC  |
| • | growth has to be slowed and roads widened                              | FC  |
| • | use of human traffic directors at peak travel times                    | FC  |
| • | concentrate efforts on needs of working class people                   | FC  |
| • | all transportation projects affect people's lives                      | FC  |
| • | all transportation projects affect air quality and energy use          | FC  |
| • | negative feelings about transportation planning in community           | FC  |
| • | police needed to direct traffic at Versailles Rd. and Wellesley Hts.   | FC  |
| • | transportation is lagging behind growth and development                | FC  |
| • | replace MPO Transportation Policy Committee                            | FC  |
| • | appoint knowledgeable people to Policy Committee; not just             |     |
|   | politicians  | FC  |
| • | transportation agencies are doing as much as politicians will allow    | FC  |
| • | let public know that "radical thinking" options exist for all projects | FC  |
|   |  |     |

FR= Fayette Representative

FC= Fayette Citizen

FNA= Fayette Neighborhood Association

JR= Jessamine Representative

JC= Jessamine Citizen

JNA= Jessamine Neighborhood Association

O= Other or Unknown

# PUBLIC PARTICIPATION QUESTIONNAIRE

Summary of Written Comments (October 2003 survey for Public Participation Plan update)

Question #1 What is your home ZIP Code?

A total of 19 out of 19 respondents from 8 different ZIP codes answered this question.

Question #2

What is your work ZIP Code?

A total of 13 out of 19 respondents from 6 different ZIP codes answered this question.

## Question #3

On average, how many miles is your commute from home to work, one way?

A total of 14 out of 19 respondents answered this question. The average was 8.9 miles one way. 36% of respondents had a commute distance of less than 4 miles one way.

## Ouestion #4

How would you rate the transportation options (car, bus, bike, walk) available to you?

A total of 18 out of 19 respondents answered this question.

| Rating    | <u>Number</u> | <u>Percentage</u> |
|-----------|---------------|-------------------|
| Excellent | 5             | 27.80%            |
| Very Good | 0             | 0%                |
| Average   | 7             | 38.90%            |
| Adequate  | 3             | 16.65%            |
| Poor      | 3             | 16 65%            |

## Question #5

How is the quality of your travel experience? (minimal time, congestion, and aggravation)

A total of 16 out of 19 respondents answered this question.

| Rating    | <u>Number</u> | <u>Percentage</u> |
|-----------|---------------|-------------------|
| Excellent | 3             | 18.75%            |
| Very Good | 3             | 18.75%            |
| Average   | 3             | 18.75%            |
| Adequate  | 4             | 25.00%            |
| Poor      | 3             | 18.75%            |

## Question #6

Traffic congestion is getting worse. If you had a choice, would you still drive if:

A total of 10 out of 19 respondents answered this question. Four people wrote clarifying comments.

| Manalana | Danaant          |
|----------|------------------|
| Number   | <u>Percent</u>   |
| 3        | 30%              |
| 2        | 20%              |
| 1        | 10%              |
| 3        | 30%              |
| 1        | 10%              |
|          | Number 3 2 1 3 1 |

Question #7

How do you currently commute to work?

A total of 15 out of 19 respondents answered this question. One respondent chose both walking and drive alone.

| Commute Type    | <u>Number</u> | Percentage |
|-----------------|---------------|------------|
| Walking         | 1             | 6.7%       |
| Biking          | 1             | 6.7%       |
| Bus             | 0             | 0%         |
| Carpool/Vanpool | 1             | 6.7%       |
| Drive Alone     | 13            | 86.7%      |
| Other           | 0             | 0%         |

## Ouestion #8

Are you interested in using an alternative mode to get to work? If so, what would you prefer?

A total of 15 out of 19 respondents answered this question. Several respondents chose more than one alternative mode.

| <u>Number</u> | <u>Percentage</u> |
|---------------|-------------------|
| 1             | 6.7%              |
| 1             | 6.7%              |
| 6             | 40%               |
| 7             | 47%               |
| 3             | 20%               |
| 3             | 20%               |
|               | 1<br>1<br>6<br>7  |

## Question #9

Order the following ways to improve traffic congestion, mobility and air quality. (using 1-4 with one as the best way)

A total of 14 out of 19 respondents answered this question.

| <u>Method</u>  | <u>Average</u> |
|--|----------------|
| Add additional lanes to existing roadways or build new roads | 2.78           |
| Use traffic management techniques such as advance warning    | 2.00           |
| of traffic congestion, computerized traffic signals, faster  |                |
| clearing of traffic accidents                                |                |
| Expand existing public transportation such as bus service,   | 2.71           |
| bike paths, and/or carpooling                                |                |
| Investment in new public transportation such as light rail,  | 2.50           |
| dedicated carpool lanes and/or express bus service           |                |

## Question #10

Assuming transit is available, what would it take to get you to take transit to work? (using 1-4 with one as the best way)

A total of 12 out of 19 respondents answered this question.

| Change  | <u>Average</u> |
|---|----------------|
| Taking transit would have to be faster than driving, door-to-door.    | 2.50           |
| I would take transit if I did not have to transfer or walk a long way | 2.17           |
| to my destination.  |                |
| Parking availability decrease and fees increase significantly.        | 3.25           |
| Transit would have to be more comfortable.                            | 3.91           |
| There would have to be enough transit opportunities to allow me to    | 3.16           |
| run my errands during my lunch hour.                                  |                |

## Question #11

It is appropriate to allow roads to become more congested in certain areas if this slows further growth.

A total of 16 out of 19 respondents answered this question.

| Rating            | <u>Number</u> | <u>Percentage</u> |
|-------------------|---------------|-------------------|
| Strongly Agree    | 1             | 6.25%             |
| Agree             | 3             | 18.75%            |
| Neutral           | 4             | 25.00%            |
| Disagree          | 5             | 31.25%            |
| Strongly Disagree | 3             | 18.75%            |

## Question #12

I am aware of how transportation projects are selected to be built.

A total of 17 out of 19 respondents answered this question.

| True   | False  |  |
|--------|--------|--|
| 17.65% | 82.35% |  |

## Question #13

I am aware that there is a Long Range Transportation Plan.

A total of 17 out of 19 respondents answered this question.

| <u>True</u> | <u>False</u> |
|-------------|--------------|
| 58 82%      | 41 18%       |

## Ouestion #14

I regularly listen for the traffic reports on television and radio.

A total of 17 out of 19 respondents answered this question.

| <u>True</u> | <u>False</u> |
|-------------|--------------|
| 64.70%      | 35.30%       |

## **PUBLIC PARTICIPATION COMMENT SHEETS**

Summary of Written Comments
(January 2004 Fayette County Public Meeting on 2030 Long Range Transportation Plan)

- Inbound route 68 am (6:30 7:30) left turn lane onto inner circle of New Circle <u>always</u> congested. I drive by hundreds of yards of poor folks.
- General improvement outbound from New Circle onto route 68. We used to get onto 68 then hit a red light south of the overpass.
- Signal/lane change on 27. Why does the a.m. 7-9 start earlier than 7 (that is good) and why does the p.m. end at 6?? The traffic is very heavy after 6 p.m. Revisit this issue.
- Weekend travel in town is awful. Lights out of sequence, too long red, etc.
- The high volume of traffic on certain streets in the downtown area is incommensurate with the historic nature of these areas, and degrades the livability of the entire downtown area. For example, the measured vehicle rates on South Upper are very similar to the projected rates of the Newtown Pike Extension. The difference is that South Upper is a two-lane road passing thru an historic neighborhood with homes at a very small setback. We encourage the city to consider broader use of two-way roads in the downtown to address this issue.
- I've found in my hometown of Louisville, there are some terrible traffic problems in dense commercial and residential areas like Hurstborne Road. I hope that here the city will prompt developers to serve the larger community by encouraging developments with multiple exits. Left alone, the tendency is toward single entrances with many cul de sacs that sell for higher prices, but this establishes a legacy of traffic problems of a one-time profit. I would support some system to influence such developments.
- It seems to me that reducing access points to some roads like Man O' War could reduce the time needed to travel across town, and get people off the roads and to where they are going faster.
- I'd like to have more bike lanes that go from residential areas outside of New Circle to the UK/Downtown area, and more bike lanes in general. It is simply too dangerous to ride on many roads in Lexington, even those designated as a bike route.
- Lexington planners should also push to change zoning laws that would help all business and residential areas to integrate. It is a real shame to have to own a car to go to the grocery store, or any other store for that matter. Many areas between Tates Creek and Nicholasville Road epitomize poor urban planning because while the houses are nice, having to own a car just to live there raises many problems for lower income households. Integrated zoning policy and higher population densities are desirable!

## PUBLIC PARTICIPATION COMMENT SHEETS

Summary of Written Comments (February 2004 Jessamine County Public Meeting on 2030 Long Range Transportation Plan)

- Brannon Road needs to be widened soon!
- I think the state needs to take care of the roads better. Not in certain places, but where needed.
- We need transportation to and from Lexington for those that can't drive or don't have a car. Doctor's appointments are necessary for those that have to go to Lexington.

- We also need transportation to places where we can ride on a train from here instead of having to go all the way to Maysville to catch a train.
- Need to widen roads enough for today's vehicles.
- Make safer shoulders, provide speed and stop signs where needed.
- Provide turning lanes at intersections.
- Provide light rail or bus system that's convenient, clean, inexpensive, reliable, and going to places needed.
- Better pedestrian sidewalks are needed, more complete so they go places and connect.
- Off road bicycle riding paths through the countryside.
- Put in speed "noise" bumps on bad curves (like the ones at toll booths) to warn traffic to slow down.
- Work with surrounding counties to make comprehensive land use/road use plans.
- Put in trees, bushes, grass, etc. to improve the air, test regularly.
- Provide good access roads to established airports.
- Get more input.
- Need to widen US 27 and US 68 all the way into downtown Lexington.
- Need to widen Rose Street from US 27 to Vine Street and put it underground from Hugulet to Columbia.
- Make developers contribute more.
- State and Federal gas taxes do not produce enough money to accommodate growth and fix existing poblems.
- Fortune Drive should be extended from Liberty Road to connect with Codell Drive near Palumbo.
- Include bike lanes with all widening projects, especially Newtown Pike.
- Build street from Bryan Avenue and North Limestone to 7<sup>th</sup> and Upper.
- Widen combined route portion of interstates 64 and 75.

# APPENDIX 4

## UNSCHEDULED NEEDS LISTS

| Num | County  | Route | Miles | Fed | Description                    | Total Cost | Priority |
|-----|---------|-------|-------|-----|--------------------------------|------------|----------|
|     |         |       |       |     | NEW INTERCHANGE AT US 25       |            |          |
|     |         |       |       |     | (GEORGETOWN RD) IN             |            |          |
| 1   | FAYETTE | I-64  | 0.1   | NHS | LEXINGTON                      | \$25,000   | L        |
|     |         |       |       |     | MAJOR WIDENING FOR 4           | ,          |          |
|     |         |       |       |     | ADDITIONAL LANES (6 TO 10      |            |          |
|     |         |       |       |     | LANES) FROM I-64/75            |            |          |
|     |         |       |       |     | INTERĆHANGE NW OF              |            |          |
|     |         |       |       |     | LEXINGTON TO I-64/75           |            |          |
|     |         |       |       |     | INTERCHANGE NE OF              |            |          |
|     |         |       |       |     | LEXINGTON. INCLUDES            |            |          |
|     |         |       |       |     | ADDITIONAL LANE FOR I-75 TO    |            |          |
|     |         |       |       |     | IRON WORKS PIKE. COST          |            |          |
|     |         |       |       |     | REPRESENTS MOST                |            |          |
| 2   | FAYETTE | I-64  | 6.4   | NHS | EXPENSIVE ALTERNATIVE.         | \$160,000  | L        |
|     |         |       |       |     | CONSTRUCT ADDITIONAL LANE      |            |          |
|     |         |       |       |     | ON NB EXIT RAMP AT US 27 IN    |            |          |
| 3   | FAYETTE | I-64  | 0.1   | NHS | LEXINGTON                      | \$120      | M        |
|     |         |       |       |     | MAJOR WIDENING FOR 2           |            |          |
|     |         |       |       |     | ADDITIONAL LANES (6 TO 8       |            |          |
|     |         |       |       |     | LANES) FROM I-64\75            |            |          |
|     |         |       |       |     | INTERĆHANGE NE OF              |            |          |
|     |         |       |       |     | LEXINGTON TO MAN O'WAR         |            |          |
|     |         |       |       |     | BLVD. SEE 04/95 I-64\75 DRAFT  |            |          |
| 4   | FAYETTE | I-75  | 3.0   | NHS | SCOPING STUDY REPORT.          | \$14,200   | M        |
|     |         |       |       |     | MAJOR WIDENING FROM I-75       |            |          |
|     |         |       |       |     | TO ETTER LANE. ADDITIONAL      |            |          |
|     |         |       |       |     | FUNDS NEEDED IN ADDITION       |            |          |
|     |         |       |       |     | TO FUNDS SCHEDULED IN 6YP      |            |          |
| 5   | FAYETTE | US 25 | 4.1   | STP | ITEMS 07-122.00 AND 07-122.01. | \$8,000    | Н        |
|     |         |       |       |     | RICHMOND RD - MAJOR            |            |          |
|     |         |       |       |     | WIDENING TO 6 LANES FROM       |            |          |
|     |         |       |       |     | IDLE HOUR DR TO NEW CIRCLE     |            |          |
|     |         |       |       |     | RD (KY 4) IN LEXINGTON. SEE    |            |          |
|     |         |       |       |     | SEGMENT 2 IN JULY, 1998        |            |          |
| 6   | FAYETTE | US 25 | 0.9   | NHS | ADVANCE PLANNING STUDY.        | \$6,600    | M        |
|     |         |       |       |     | RICHMOND RD -                  |            |          |
|     |         |       |       |     | RECONSTRUCTION FROM MAN        |            |          |
|     |         |       |       |     | O WAR BLVD TO KY 418 IN        |            |          |
| 7   | FAYETTE | US 25 | 1.5   | NHS | LEXINGTON                      | \$6,000    | M        |
|     |         |       |       |     | RICHMOND RD - REALIGN          |            |          |
|     |         |       |       |     | APPROACHES AT SQUIRES RD       |            |          |
|     |         |       |       |     | AND JERRICO DR TO REMOVE       |            |          |
|     |         |       |       |     | OFFSET INTERSECTION IN         |            |          |
| 8   | FAYETTE | US 25 | 0.1   | NHS | LEXINGTON                      | \$600      | M        |
|     |         |       |       |     | NICHOLASVILLE RD -             |            |          |
|     |         |       |       |     | RECONSTRUCT INTERSECTION       |            |          |
| 9   | FAYETTE | US 27 | 0.1   | NHS | AT ALUMNI DR IN LEXINGTON      | \$800      | M        |
|     |         |       |       |     | <b>SOUTH LIMESTONE</b> - MAJOR |            |          |
|     |         |       |       |     | WIDENING FROM UPPER ST TO      |            |          |
| 10  | FAYETTE | US 27 | 0.9   | NHS | ROSE ST IN LEXINGTON           | \$6,000    | M        |
| _   |         |       |       |     | NICHOLASVILLE RD - MAJOR       |            | _        |
|     |         |       |       |     | WIDENING FROM ROSE ST TO       |            |          |
| 11  | FAYETTE | US 27 | 1.5   | NHS | SOUTHLAND DR IN LEXINGTON      | \$10,000   | M        |

| NICHOLASVILLE RD - MAJOR   WIDENING TO 9 LANES FROM   S5,000   M   WIDENING TO 9 LANES FROM   S5,000   M   WIDENING TO 9 LANES FROM   WIDENING FROM US 26 (MAIN   ST) TO WINCHESTER RD IN   LEXINGTON   S2,400   L   WINCHESTER RD   MAJOR   WINCHESTER RD   MAJOR   WINCHESTER RD   MAJOR   WINCHESTER RD   MAJOR   WIDENING FROM MIDLAND AVE   TO RY 4 MI LEXINGTON   S12,000   L   WINCHESTER RD   MAJOR   WIDENING FROM MY 4 TO 1-75   WIDENING  |             |                |        |          |          |                                       |                 |  |
|--|-------------|----------------|--------|----------|----------|---------------------------------------|-----------------|--|
| 12 FAYETTE   |             |                |        |          |          | NICHOLASVILLE RD - MAJOR              |                 |  |
| NICHOLASVILLE RD - MAJOR   WIDENING TO 9 LANDES FROM KY 4 TO MAN 0 WAR BLYD IN   |             |                |        |          |          |                                       |                 |  |
| MIDENING TO 9 LANES FROM   KY 4 TO MAN O WAR BLVD IN   S9,100   M   MIDENING FROM US 25 (MAIN ST) TO WINCHESTER RD IN   S2,400   L   WINCHESTER RD IN   S2,4 | 12          | FAYETTE        | US 27  | 1.1      | NHS      |                                       | \$5,000         | M  |
| 13   FAYETTE   US 27   1.5   NHS   LEXINGTON   S9,100   M  |             |                |        |          |          |                                       |                 |  |
| 13 FAYETTE   |             |                |        |          |          | WIDENING TO 9 LANES FROM              |                 |  |
| MIDLAND AVE. MAJOR   WIDENING FROM US 25 (MAIN ST) TO WINCHESTER RD IN   |             |                |        |          |          | KY 4 TO MAN O WAR BLVD IN             |                 |  |
| MIDENING FROM US 25 (MAIN ST) TO WINCHESTER RD IN   \$2,400  | 13          | FAYETTE        | US 27  | 1.5      | NHS      | LEXINGTON                             | \$9,100         | M  |
| 14 FAYETTE   | -           |                |        |          |          | MIDLAND AVE - MAJOR                   |                 |  |
| 14 FAYETTE   |             |                |        |          |          | WIDENING FROM US 25 (MAIN             |                 |  |
| 14 FAYETTE   |             |                |        |          |          |                                       |                 |  |
| MINCHESTER RD - MAJOR   MIDRAND AVE   MIDRENING FROM MIDLAND AVE   MIDRENING FROM MIDLAND AVE   MIDRENING FROM MIDLAND AVE   MIDRING FROM MIDLAND AVE   MIDRING FROM KY 4 TO 1-75   MIDRING FROM FORBES RD   MAJOR   MIDRING FROM FROM FROM FROM FROM KENLAND   MIDRING FROM KEENLAND   MIDRING FROM KEENLAND   MIDRING FROM KEENLAND   MIDRING FROM KEENLAND   MIDRING FROM MEENLAND   MIDRING FROM MEENLAND   MIDRING FROM MORTHBOUND   MIDRING FROM MORTHBOUND SOUTH   MIDRING FROM MASON   MIDRING | 14          | FAYETTE        | US 60  | 0.5      | NHS      |                                       | \$2,400         | L  |
| 15   FAYETTE   |             |                |        |          |          |                                       | <del>+-,:</del> |  |
| 15 FAYETTE   |             |                |        |          |          |                                       |                 |  |
| WINCHESTER RD - MAJOR  | 15          | FAYETTE        | US 60  | 2.5      | NHS      |                                       | \$12,000        | 1  |
| MIDENING FROM KY 4 TO 1-75   |             | IMILITE        | 00 00  | 2.0      | 14110    |                                       | Ψ12,000         |  |
| 16   |             |                |        |          |          |                                       |                 |  |
| VERSAILLES RD - MAJOR   WIDENING FROM FORBES RD  | 16          | FAVETTE        | 110.60 | 1.0      | NHC      |                                       | <b>¢c 000</b>   |  |
| 17   FAYETTE   |             | FATELLE        | 03 60  | 1.0      | NUO      |                                       | \$6,000         | <u>L</u>                                     |
| 17   FAYETTE   |             |                |        |          |          |                                       |                 |  |
| 18   |             | _              | 110.00 | 0.0      | h !! ! C |                                       | ** ***          |  |
| 18   | 17          | FAYEIIE        | US 60  | 2.3      | NHS      |                                       | \$9,000         | <u>      L                              </u> |
| 18   |             |                |        |          |          |                                       |                 |  |
| HARRODSBURG RD   |             |                |        |          |          |                                       |                 |  |
| 19   FAYETTE   US 68   0.4   STP   WALLER AVE   \$475   M  | 18          | FAYETTE        | US 60  | 2.6      | NHS      |                                       | \$10,300        | L  |
| PAYETTE  |             |                |        |          |          | HARRODSBURG RD -                      |                 |  |
| HARRODSBURG RD ONTO   S475   M   |             |                |        |          |          | CONSTRUCT RIGHT TURN LANE             |                 |  |
| 19 FAYETTE   |             |                |        |          |          | FROM NORTHBOUND                       |                 |  |
| SOUTH BROADWAY -   CONSTRUCT RIGHT TURN LANE   FROM NORTHBOUND SOUTH   BROADWAY ONTO VIRGINIA   \$160   M  |             |                |        |          |          | HARRODSBURG RD ONTO                   |                 |  |
| CONSTRUCT RIGHT TURN LANE  | 19          | FAYETTE        | US 68  | 0.4      | STP      | WALLER AVE                            | \$475           | M  |
| CONSTRUCT RIGHT TURN LANE  | -           |                |        |          |          | SOUTH BROADWAY -                      | ·               |  |
| PROM NORTHBOUND SOUTH BROADWAY ONTO VIRGINIA   S160   M  |             |                |        |          |          |                                       |                 |  |
| BROADWAY ONTO VIRGINIA   \$160   M   |             |                |        |          |          |                                       |                 |  |
| 20 FAYETTE   |             |                |        |          |          |                                       |                 |  |
| SOUTH BROADWAY - MAJOR   WIDENING FROM US 25 (MAIN   ST) TO MASON HEADLEY RD IN     21   | 20          | FAYETTE        | US 68  | 0.1      | STP      |                                       | \$160           | М  |
| VIDENING FROM US 25 (MAIN ST) TO MASON HEADLEY RD IN ST) TO MASON HEADLEY RD IN ST) TO MASON HEADLEY RD IN ST) TO MASON HEADLEY RD TO MAJOR WIDENING FROM MASON HEADLEY RD TO KY 4 IN SEQUENCE RD TO KY 4 IN SEQUENCE RD TO MAJOR WIDENING TO 6 LANES FROM NEW CIRCLE RD TO MAN O WAR BLVD IN LEXINGTON. SEE SEGMENTS 3a & 3b IN AUGUST, 1998 ADVANCE PLANNING SEE SEGMENTS 3a & 3b IN AUGUST, 1998 ADVANCE PLANNING SEE SEGMENTS SEE SE SEE SEE SEE SEE SEE SEE SEE SE   | <del></del> | .,             |        | <u> </u> |          |                                       | Ψ.σσ            |  |
| ST) TO MASON HEADLEY RD IN   \$7,700 M   |             |                |        |          |          |                                       |                 |  |
| 21 FAYETTE   |             |                |        |          |          |                                       |                 |  |
| HARRODSBURG RD - MAJOR   WIDENING FROM MASON   HEADLEY RD TO KY 4 IN   | 21          | FAVETTE        | 115 68 | 17       | STD      | ,                                     | \$7.700         | М  |
| WIDENING FROM MASON  |             | IAILIIL        | 00 00  | 1.7      | 011      |                                       | Ψ1,100          | 141  |
| HEADLEY RD TO KY 4 IN  |             |                |        |          |          |                                       |                 |  |
| 22 FAYETTE   |             |                |        |          |          |                                       |                 |  |
| HARRODSBURG RD - MAJOR WIDENING TO 6 LANES FROM NEW CIRCLE RD TO MAN O WAR BLVD IN LEXINGTON. SEE SEGMENTS 38 & 3b IN AUGUST, 1998 ADVANCE PLANNING  23 FAYETTE US 68 1.5 STP STUDY. \$11,000 H  NEW CIRCLE RD - ACCESS CONTROL IMPROVEMENTS FROM KY 922 (NEWTOWN PIKE) TO BOARDWALK ON THE NORTH SIDE OF LEXINGTON. INCLUDES NEW INTERCHANGE AT KY 922. SEE APRIL, 2002  24 FAYETTE KY 4 0.7 NHS PLANNING STUDY. \$15,600 M  NEW CIRCLE RD - ACCESS CONTROL IMPROVEMENTS FROM BOARDWALK TO KY 353 (RUSSELL CAVE RD) ON THE  | 22          |                | 110.00 | 2.0      | CTD      |                                       | <b>#0.000</b>   |  |
| WIDENING TO 6 LANES FROM NEW CIRCLE RD TO MAN O WAR BLVD IN LEXINGTON. SEE SEGMENTS 3a & 3b IN AUGUST, 1998 ADVANCE PLANNING  23 FAYETTE US 68 1.5 STP STUDY. \$11,000 H  NEW CIRCLE RD - ACCESS CONTROL IMPROVEMENTS FROM KY 922 (NEWTOWN PIKE) TO BOARDWALK ON THE NORTH SIDE OF LEXINGTON. INCLUDES NEW INTERCHANGE AT KY 922. SEE APRIL, 2002  24 FAYETTE KY 4 0.7 NHS PLANNING STUDY. \$15,600 M  NEW CIRCLE RD - ACCESS CONTROL IMPROVEMENTS FROM BOARDWALK TO KY 353 (RUSSELL CAVE RD) ON THE   |             | FATELLE        | 05 08  | ∠.∪      | 215      |                                       | <b>Φ</b> δ,000  | íVI  |
| NEW CIRCLE RD TO MAN O WAR BLVD IN LEXINGTON. SEE SEGMENTS 3a & 3b IN AUGUST, 1998 ADVANCE PLANNING  23 FAYETTE US 68 1.5 STP STUDY. \$11,000 H  NEW CIRCLE RD - ACCESS CONTROL IMPROVEMENTS FROM KY 922 (NEWTOWN PIKE) TO BOARDWALK ON THE NORTH SIDE OF LEXINGTON. INCLUDES NEW INTERCHANGE AT KY 922. SEE APRIL, 2002 AT KY 922. SEE APRIL, 2002 PLANNING STUDY. \$15,600 M  NEW CIRCLE RD - ACCESS CONTROL IMPROVEMENTS FROM BOARDWALK TO KY 353 (RUSSELL CAVE RD) ON THE  |             |                |        |          |          |                                       |                 |  |
| WAR BLVD IN LEXINGTON. SEE SEGMENTS 3a & 3b IN AUGUST, 1998 ADVANCE PLANNING  23 FAYETTE US 68 1.5 STP STUDY. \$11,000 H  NEW CIRCLE RD - ACCESS CONTROL IMPROVEMENTS FROM KY 922 (NEWTOWN PIKE) TO BOARDWALK ON THE NORTH SIDE OF LEXINGTON. INCLUDES NEW INTERCHANGE AT KY 922. SEE APRIL, 2002  24 FAYETTE KY 4 0.7 NHS PLANNING STUDY. \$15,600 M  NEW CIRCLE RD - ACCESS CONTROL IMPROVEMENTS FROM BOARDWALK TO KY 353 (RUSSELL CAVE RD) ON THE   |             |                |        |          |          |                                       |                 |  |
| SEGMENTS 3a & 3b IN AUGUST, 1998 ADVANCE PLANNING  23 FAYETTE US 68 1.5 STP STUDY. \$11,000 H  NEW CIRCLE RD - ACCESS CONTROL IMPROVEMENTS FROM KY 922 (NEWTOWN PIKE) TO BOARDWALK ON THE NORTH SIDE OF LEXINGTON. INCLUDES NEW INTERCHANGE AT KY 922. SEE APRIL, 2002  24 FAYETTE KY 4 0.7 NHS PLANNING STUDY. \$15,600 M  NEW CIRCLE RD - ACCESS CONTROL IMPROVEMENTS FROM BOARDWALK TO KY 353 (RUSSELL CAVE RD) ON THE  |             |                |        |          |          |                                       |                 |  |
| 1998 ADVANCE PLANNING 23 FAYETTE US 68 1.5 STP STUDY. \$11,000 H  NEW CIRCLE RD - ACCESS CONTROL IMPROVEMENTS FROM KY 922 (NEWTOWN PIKE) TO BOARDWALK ON THE NORTH SIDE OF LEXINGTON. INCLUDES NEW INTERCHANGE AT KY 922. SEE APRIL, 2002 24 FAYETTE KY 4 0.7 NHS PLANNING STUDY. \$15,600 M  NEW CIRCLE RD - ACCESS CONTROL IMPROVEMENTS FROM BOARDWALK TO KY 353 (RUSSELL CAVE RD) ON THE  |             |                |        |          |          |                                       |                 |  |
| 23 FAYETTE US 68 1.5 STP STUDY. \$11,000 H  NEW CIRCLE RD - ACCESS CONTROL IMPROVEMENTS FROM KY 922 (NEWTOWN PIKE) TO BOARDWALK ON THE NORTH SIDE OF LEXINGTON. INCLUDES NEW INTERCHANGE AT KY 922. SEE APRIL, 2002  24 FAYETTE KY 4 0.7 NHS PLANNING STUDY. \$15,600 M  NEW CIRCLE RD - ACCESS CONTROL IMPROVEMENTS FROM BOARDWALK TO KY 353 (RUSSELL CAVE RD) ON THE   |             |                |        |          |          |                                       |                 |  |
| NEW CIRCLE RD - ACCESS CONTROL IMPROVEMENTS FROM KY 922 (NEWTOWN PIKE) TO BOARDWALK ON THE NORTH SIDE OF LEXINGTON. INCLUDES NEW INTERCHANGE AT KY 922. SEE APRIL, 2002 24 FAYETTE KY 4 0.7 NHS PLANNING STUDY. \$15,600 M  NEW CIRCLE RD - ACCESS CONTROL IMPROVEMENTS FROM BOARDWALK TO KY 353 (RUSSELL CAVE RD) ON THE  |             |                |        |          |          |                                       | <b>.</b>        |  |
| CONTROL IMPROVEMENTS FROM KY 922 (NEWTOWN PIKE) TO BOARDWALK ON THE NORTH SIDE OF LEXINGTON. INCLUDES NEW INTERCHANGE AT KY 922. SEE APRIL, 2002  24 FAYETTE KY 4 0.7 NHS PLANNING STUDY. \$15,600 M  NEW CIRCLE RD - ACCESS CONTROL IMPROVEMENTS FROM BOARDWALK TO KY 353 (RUSSELL CAVE RD) ON THE  | 23          | FAYETTE        | US 68  | 1.5      | STP      |                                       | \$11,000        | <u>H</u>                                     |
| FROM KY 922 (NEWTOWN PIKE) TO BOARDWALK ON THE NORTH SIDE OF LEXINGTON. INCLUDES NEW INTERCHANGE AT KY 922. SEE APRIL, 2002  24 FAYETTE KY 4 0.7 NHS PLANNING STUDY. \$15,600 M  NEW CIRCLE RD - ACCESS CONTROL IMPROVEMENTS FROM BOARDWALK TO KY 353 (RUSSELL CAVE RD) ON THE   |             |                |        |          |          | NEW CIRCLE RD - ACCESS                |                 |  |
| TO BOARDWALK ON THE NORTH SIDE OF LEXINGTON. INCLUDES NEW INTERCHANGE AT KY 922. SEE APRIL, 2002  24 FAYETTE KY 4 0.7 NHS PLANNING STUDY. \$15,600 M  NEW CIRCLE RD - ACCESS CONTROL IMPROVEMENTS FROM BOARDWALK TO KY 353 (RUSSELL CAVE RD) ON THE  |             |                |        |          |          | CONTROL IMPROVEMENTS                  |                 |  |
| NORTH SIDE OF LEXINGTON. INCLUDES NEW INTERCHANGE AT KY 922. SEE APRIL, 2002  24 FAYETTE KY 4 0.7 NHS PLANNING STUDY. \$15,600 M  NEW CIRCLE RD - ACCESS CONTROL IMPROVEMENTS FROM BOARDWALK TO KY 353 (RUSSELL CAVE RD) ON THE  |             |                |        |          |          | FROM KY 922 (NEWTOWN PIKE)            |                 |  |
| INCLUDES NEW INTERCHANGE AT KY 922. SEE APRIL, 2002 24 FAYETTE KY 4 0.7 NHS PLANNING STUDY. \$15,600 M  NEW CIRCLE RD - ACCESS CONTROL IMPROVEMENTS FROM BOARDWALK TO KY 353 (RUSSELL CAVE RD) ON THE  |             |                |        |          |          | TO BOARDWALK ON THE                   |                 |  |
| AT KY 922. SEE APRIL, 2002  24 FAYETTE KY 4 0.7 NHS PLANNING STUDY. \$15,600 M  NEW CIRCLE RD - ACCESS  CONTROL IMPROVEMENTS FROM BOARDWALK TO KY 353 (RUSSELL CAVE RD) ON THE   |             |                |        |          |          | NORTH SIDE OF LEXINGTON.              |                 |  |
| 24 FAYETTE KY 4 0.7 NHS PLANNING STUDY. \$15,600 M  NEW CIRCLE RD - ACCESS CONTROL IMPROVEMENTS FROM BOARDWALK TO KY 353 (RUSSELL CAVE RD) ON THE  |             |                |        |          |          | INCLUDES NEW INTERCHANGE              |                 |  |
| 24 FAYETTE KY 4 0.7 NHS PLANNING STUDY. \$15,600 M  NEW CIRCLE RD - ACCESS CONTROL IMPROVEMENTS FROM BOARDWALK TO KY 353 (RUSSELL CAVE RD) ON THE  |             |                |        |          |          | AT KY 922. SEE APRIL, 2002            |                 |  |
| NEW CIRCLE RD - ACCESS  CONTROL IMPROVEMENTS  FROM BOARDWALK TO KY 353  (RUSSELL CAVE RD) ON THE   | 24          | <b>FAYETTE</b> | KY 4   | 0.7      | NHS      | · · · · · · · · · · · · · · · · · · · | \$15,600        | M  |
| CONTROL IMPROVEMENTS FROM BOARDWALK TO KY 353 (RUSSELL CAVE RD) ON THE   | -           |                |        |          |          |                                       | •               |  |
| FROM BOARDWALK TO KY 353<br>(RUSSELL CAVE RD) ON THE   |             |                |        |          |          |                                       |                 |  |
| (RUSSELL CAVE RD) ON THE   |             |                |        |          |          |                                       |                 |  |
|  |             |                |        |          |          |                                       |                 |  |
| 25 FAYETTE KY 4 0.3 NHS NORTH SIDE OF LEXINGTON. \$21,100 H  |             |                |        |          |          |                                       | <u>.</u>        |  |
|  | 25          | FAYETTE        | KY 4   | 0.3      | NHS      | NORTH SIDE OF LEXINGTON.              | \$21,100        | <u> </u>                                     |

|     |         |        |      |       | INCLUDES NEW INTERCHANGE                             |               |          |
|-----|---------|--------|------|-------|--|---------------|----------|
|     |         |        |      |       |  |               |          |
|     |         |        |      |       |  |               |          |
|     |         |        |      |       |  |               |          |
|     |         |        |      |       | NEW CIRCLE RD - ACCESS                               |               |          |
|     |         |        |      |       | CONTROL IMPROVEMENTS                                 |               |          |
|     |         |        |      |       | FROM KY 353 (RUSSELL CAVE                            |               |          |
|     |         |        |      |       | RD) TO NORTH LIMESTONE<br>STREET ON THE NORTH SIDE   |               |          |
|     |         |        |      |       | OF LEXINGTON. INCLUDES                               |               |          |
|     |         |        |      |       | RELOCATION OF US 27 (NORTH                           |               |          |
|     |         |        |      |       | BROADWAY) WITH NEW                                   |               |          |
|     |         |        |      |       | BRIDGE OVER NEW CIRCLE RD.                           |               |          |
| 26_ | FAYETTE | KY 4   | 0.5  | NHS   | SEE 2002 STUDY.                                      | \$24,100      | <u>H</u> |
|     |         |        |      |       | NEW CIRCLE RD - ACCESS CONTROL IMPROVEMENTS          |               |          |
|     |         |        |      |       | FROM NORTH LIMESTONE                                 |               |          |
|     |         |        |      |       | STREET TO US 60                                      |               |          |
|     |         |        |      |       | (WINCHESTER RD) ON THE                               |               |          |
|     |         |        |      |       | NORTH SIDE OF LEXINGTON.                             |               |          |
| 27  | FAYETTE | KY 4   | 1.8  | МПС   | SEE APRIL, 2002 PLANNING                             | ¢15 200       | н        |
| 27_ | FAICIIC | r\ 1 4 | 1.0  | NHS   | STUDY.  NEW CIRCLE RD - ACCESS                       | \$15,300      |          |
|     |         |        |      |       | CONTROL IMPROVEMENTS                                 |               |          |
|     |         |        |      |       | FROM US 60 (WINCHESTER RD)                           |               |          |
|     |         |        |      |       | TO KY 1927 (LIBERTY RD) ON                           |               |          |
|     |         |        |      |       | THE NORTH SIDE OF                                    |               |          |
| 20  | EAVETTE | 1/\/ 4 | 1.0  | NILIO | LEXINGTON. SEE APRIL, 2002                           | <b>#0 =00</b> | ш        |
| 28_ | FAYETTE | KY 4   | 1.0  | NHS   | PLANNING STUDY.  NEW CIRCLE RD - ACCESS              | \$8,500       | н        |
|     |         |        |      |       | CONTROL IMPROVEMENTS                                 |               |          |
|     |         |        |      |       | FROM KY 1927 (LIBERTY RD) TO                         |               |          |
|     |         |        |      |       | WOODHILL DRIVE ON THE                                |               |          |
|     |         |        |      |       | NORTH SIDE OF LEXINGTON.                             |               |          |
| 29  | FAYETTE | KY 4   | 0.8  | NHS   | SEE APRIL, 2002 PLANNING<br>STUDY.                   | \$11,500      | н        |
|     |         | 1117   | 5.5  | 74110 | NEW CIRCLE RD - MAJOR                                | ψ11,000       |          |
|     |         |        |      |       | WIDENING TO 6 LANES FROM                             |               |          |
|     |         |        |      |       | US 25 (RICHMOND RD) TO US 27                         |               |          |
|     |         |        |      |       | (NICHOLASVILLE RD). SEE                              |               |          |
|     |         |        |      |       | SEGMENTS 1a, 1b & 1c IN<br>AUGUST, 1998 ADVANCE      |               |          |
| 30  | FAYETTE | KY 4   | 4.4  | NHS   | PLANNING STUDY.                                      | \$83,000      | н        |
|     |         | 131 7  | 1. 1 | 74110 | NEW CIRCLE RD - MAJOR                                | Ψου,σου       |          |
|     |         |        |      |       | WIDENING TO 6 LANES FROM                             |               |          |
|     |         |        |      |       | US 27 (NICHOLASVILLE RD) TO                          |               |          |
|     |         |        |      |       | US 60 (VERSAILLES RD). SEE                           |               |          |
|     |         |        |      |       | SEGMENTS 2a & 2b IN AUGUST,<br>1998 ADVANCE PLANNING |               |          |
| 31  | FAYETTE | KY 4   | 4.6  | NHS   | STUDY.   | \$37,700      | н        |
|     |         |        |      |       | NEW CIRCLE RD - MAJOR                                | , ,           |          |
|     |         |        |      |       | WIDENING TO 6 LANES FROM                             |               |          |
|     |         |        |      |       | US 60 (VERSAILLES RD) TO KY                          |               |          |
|     |         |        |      |       | 922 (NEWTOWN PIKE). SEE<br>SEGMENTS 3a THRU 4 IN     |               |          |
|     |         |        |      |       | AUGUST, 1998 ADVANCE                                 |               |          |
| 32  | FAYETTE | KY 4   | 4.7  | NHS   | PLANNING STUDY.                                      | \$43,100      | н        |
|     |         |        |      |       | NEW CIRCLE RD - CONSTRUCT                            | •             |          |
|     |         |        |      |       | DUAL LEFT TURN LANES AT                              | <b>* -</b>    |          |
| 33  | FAYETTE | KY 4   | 0.1  | NHS   | WOODHILL DR. IN LEXINGTON                            | \$250         | M        |

|    |                   |          |     |          | NEW CIRCLE RD - CONSTRUCT    |  |     |
|----|-------------------|----------|-----|----------|------------------------------|--|-----|
|    |                   |          |     |          | DUAL LEFT TURN LANES AT      |  |     |
| 34 | FAYETTE           | KY 4     | 0.1 | NHS      | PALUMBO DR. IN LEXINGTON     | \$250  | M   |
|    |                   |          |     |          | RUSSELL CAVE RD - MAJOR      |  |     |
|    |                   |          |     |          | WIDENING FROM WINBURN DR     |  |     |
| 35 | FAYETTE           | KY 353   | 8.0 | STP      | TO SWIGERT LN IN LEXINGTON   | \$3,000  | L   |
| -  |                   |          |     |          | NEWTOWN PIKE -               |  |     |
|    |                   |          |     |          | RECONSTRUCT INTERCHANGE      |  |     |
| 36 | FAYETTE           | KY 922   | 0.1 | NHS      | AT I-64/75 N OF LEXINGTON    | \$10,000   | M   |
| -  |                   |          |     |          | NEWTOWN PIKE - MAJOR         | . ,  | -   |
|    |                   |          |     |          | WIDENING FROM US 421 (WEST   |  |     |
|    |                   |          |     |          | MAIN ST) TO KY 4 IN          |  |     |
| 37 | FAYETTE           | KY 922   | 1.6 | NHS      | LEXINGTON                    | \$9,300  | М   |
|    | .,                |          |     |          | NEWTOWN PIKE - MAJOR         | <del>+++++++++++++++++++++++++++++++++++++</del> |     |
|    |                   |          |     |          | WIDENING FROM KY 4 TO 0.3 MI |  |     |
| 38 | FAYETTE           | KY 922   | 2.1 | NHS      | N OF I-64/75 IN LEXINGTON    | \$14,500   | Н   |
|    | 17(12112          | ICI OZZ  |     | 14110    | BRYANT ROAD - MAJOR          | Ψ14,000  |     |
|    |                   |          |     |          | WIDENING FROM I-75 TO US 60  |  |     |
|    |                   |          |     |          | (WINCHESTER RD) IN           |  |     |
| 39 | FAYETTE           | KY 1425  | 1.3 | STP      | LEXINGTON                    | \$6,500  | М   |
|    | IAILIIE           | 111 1420 | 1.0 | SIF      | OLD FRANKFORT PIKE -         | φυ,υυυ   | iVI |
|    |                   |          |     |          | CONSTRUCT TURN LANES ON      |  |     |
|    |                   |          |     |          | ALL LEGS OF FORBES RD (KY    |  |     |
|    |                   |          |     |          | 1723)/ OLD FRANKFORT PIKE    |  |     |
| 40 | FAVETTE           | VV 1601  | 0.2 | CTD      | ,                            | <sub>ው</sub>                                     | 8.4 |
| 40 | FAYETTE           | KY 1681  | 0.2 | STP      | (KY 1681) INTERSECTION       | \$600  | M   |
|    |                   |          |     |          | LIBERTY RD - MAJOR           |  |     |
|    |                   |          |     |          | WIDENING FROM KY 4 TO        |  |     |
| 44 | FAVETTE           | I/V 4007 | 1.0 | CTD      | CHURCH OF GOD IN             | <b>ኖ</b> ር <b>፫</b> 00                           | 8.5 |
| 41 | FAYETTE           | KY 1927  | 1.0 | STP      | LEXINGTON MAJOR              | \$6,500  | M   |
|    |                   |          |     |          | PARKERS MILL RD - MAJOR      |  |     |
|    |                   |          |     |          | WIDENING FROM VERSAILLES     |  |     |
|    | - A \             | 107.4000 |     | 0.70     | RD TO MAN-O-WAR BLVD IN      | 40.500   |     |
| 42 | FAYETTE           | KY 1968  | 2.1 | STP      | LEXINGTON                    | \$3,500  | M   |
|    |                   |          |     |          | TATES CREEK RD - MAJOR       |  |     |
|    |                   |          |     |          | WIDENING FROM MALABU DR      |  |     |
|    |                   |          |     |          | TO ARMSTRONG MILL RD IN      |  |     |
| 43 | FAYETTE           | KY 1974  | 0.7 | STP      | LEXINGTON                    | \$3,300  | M   |
|    |                   |          |     |          | TATES CREEK RD - MAJOR       |  |     |
|    |                   |          |     |          | WIDENING FROM ARMSTRONG      |  |     |
|    |                   |          |     |          | MILL RD TO MAN O WAR BLVD    |  |     |
| 44 | FAYETTE           | KY 1974  | 1.0 | STP      | IN LEXINGTON                 | \$4,000  | M   |
|    |                   |          |     |          | TATES CREEK RD -             |  |     |
|    |                   |          |     |          | RECONSTRUCT INTERSECTION     |  |     |
| 45 | FAYETTE           | KY 1974  | 0.1 | STP      | AT FONTAINE RD IN LEXINGTON  | \$800  | M   |
|    |                   |          | _   |          | TATES CREEK RD -             |  | _   |
|    |                   |          |     |          | CONSTRUCT SIDEWALKS FROM     |  |     |
|    |                   |          |     |          | ARMSTRONG MILL RD TO MAN     |  |     |
| 46 | FAYETTE           | KY 1974  | 1.1 | STP      | 'O WAR BLVD IN LEXINGTON     | \$500  | M   |
|    | ·                 | <u> </u> |     |          | SPURR RD - MAJOR WIDENING    |  |     |
|    |                   |          |     |          | FROM MASTERSON STATION       |  |     |
|    |                   |          |     |          | RESIDENTIAL AREA TO US 25    |  |     |
|    |                   |          |     |          | (GEORGETOWN RD) IN           |  |     |
| 47 | FAYETTE           | KY 1977  | 1.5 | STP      | LEXINGTON                    | \$3,600  | M   |
|    |                   |          |     |          | GREENDALE RD - MAJOR         | ·  |     |
|    |                   |          |     |          | WIDENING FROM US 421 TO      |  |     |
| 48 | FAYETTE           | KY 1978  | 0.3 | STP      | MERCER RD IN LEXINGTON       | \$1,200  | М   |
| 1  | <u> </u>          |          |     |          | FAYETTE MALL ROAD - NEW      | , ,  | ·== |
|    |                   |          |     |          | CONSTRUCTION FROM            |  |     |
|    |                   |          |     |          | REYNOLDS RD TO MAN O WAR     |  |     |
|    |                   |          |     |          | BLVD. IN LEXINGTON. SEE      |  |     |
| 49 | FAYETTE           | LOCAL    | 1.2 | STP      | AUGUST, 2001 LOCAL TRAFFIC   | \$6,200  | M   |
|    | . / \ : - :     - | LOUAL    | 1.2 | <u> </u> | ACCOUNT TO THE TOTAL TO THE  | Ψ0,200   | 171 |

|            |          |            |      |      | STUDY.  |                |          |
|------------|----------|------------|------|------|---|----------------|----------|
|            |          |            |      |      |   |                |          |
|            |          |            |      |      | VILEY RD EXTENSION FROM KY                            |                |          |
|            |          |            |      |      | 922 (NEWTOWN PIKE) TO KY                              |                |          |
| 50         | FAYETTE  | LOCAL      | 1.1  | STP  | 353 (RUSSELL CAVE RD) IN LEXINGTON                    | \$3,300        | М        |
|            | TAILITE  | LOOAL      |      | 011  | LOUDON AVE - MAJOR                                    | ΨΟ,ΟΟΟ         | 141      |
|            |          |            |      |      | WIDENING FROM RUSSELL                                 |                |          |
| 51         | FAYETTE  | LOCAL      | 0.9  | STP  | CAVE RD TO OAKHILL DR IN LEXINGTON                    | \$6,500        | М        |
|            | IAILIIL  | LOCAL      | 0.9  | 311  | CLAYS MILL RD - MAJOR                                 | ψ0,500         | IVI      |
|            |          |            |      |      | WIDENING FROM US 68                                   |                |          |
| <b>5</b> 0 |          | LOCAL      | 0.4  | CTD  | (HARRODSBURD RD) TO KY 4 IN                           | £4 000         | ш        |
| 52         | FAYETTE  | LOCAL      | 2.1  | STP  | LEXINGTON  CLAYS MILL RD - MAJOR                      | \$4,900        | Н        |
|            |          |            |      |      | WIDENING FROM KY 4 TO MAN                             |                |          |
| 53         | FAYETTE  | LOCAL      | 1.6  | STP  | O' WAR BLVD IN LEXINGTON                              | \$5,200        | <u>H</u> |
|            |          |            |      |      | WILSON DOWNING RD - MAJOR<br>WIDENING FROM US 27      |                |          |
|            |          |            |      |      | (NICHOLASVILLE RD) TO                                 |                |          |
|            |          |            |      |      | BELLEAU WOOD DR IN                                    |                |          |
| 54         | FAYETTE  | LOCAL      | 1.5  | STP  | LEXINGTON   | \$7,000        | M        |
|            |          |            |      |      | WILSON DOWNING RD - MAJOR<br>WIDENING FROM BELLEAU    |                |          |
|            |          |            |      |      | WOOD DR TO KY 1974 (TATES                             |                |          |
| 55         | FAYETTE  | LOCAL      | 0.3  | STP  | CREEK PIKE) IN LEXINGTON                              | \$4,400        | M        |
|            |          |            |      |      | RUSSELL CAVE RD - MAJOR                               |                |          |
|            |          |            |      |      | WIDENING FROM US 27 (NORTH BROADWAY) TO PARK PLACE IN |                |          |
| 56         | FAYETTE  | LOCAL      | 1.1  | STP  | LEXINGTON   | \$3,700        | L        |
|            |          |            |      |      | ALUMNI DR - MAJOR WIDENING                            |                |          |
|            |          |            |      |      | FROM US 27 (NICHOLASVILLE<br>RD) TO CHINOE RD IN      |                |          |
| 57         | FAYETTE  | LOCAL      | 1.3  | STP  | LEXINGTON   | \$12,700       | M        |
|            |          |            |      |      | ALUMNI DR - MAJOR WIDENING                            |                |          |
|            |          |            |      |      | TO 4 LANES FROM CHINOE RD TO EDGEWATER DR IN          |                |          |
| 58         | FAYETTE  | LOCAL      | 1.5  | STP  | LEXINGTON   | \$6,000        | M        |
|            |          |            |      |      | ALUMNI DRIVE - MAJOR                                  | . ,            |          |
|            |          |            |      |      | WIDENING FROM EDGEWATER                               |                |          |
| 59         | FAYETTE  | LOCAL      | 1.0  | STP  | DR TO MAN O WAR BLVD IN<br>LEXINGTON                  | \$3,900        | М        |
|            |          | = 0 0 / 12 |      |      | ARMSTRONG MILL RD - MAJOR                             | <del>+-,</del> |          |
|            |          |            |      |      | WIDENING FROM KY 1974                                 |                |          |
| 60         | FAYETTE  | LOCAL      | 1.4  | STP  | (TATES CREEK PIKE) TO MAN O<br>WAR BLVD IN LEXINGTON  | \$5,100        | L        |
|            | 1711-11- | LOURL      | 1.⊣f |      | ARMSTRONG MILL RD - MAJOR                             | ψο, 100        |          |
|            |          |            |      |      | WIDENING FROM MAN O WAR                               |                |          |
| 61         | FAYETTE  | LOCAL      | 0.6  | STP  | BLVD TO KENESAW DR IN<br>LEXINGTON                    | \$2,000        | L        |
|            | INILIIE  | LOUAL      | 0.0  | SIF  | MAN O WAR BLVD - MAJOR                                | Ψ2,000         |          |
|            |          |            |      |      | WIDENING FROM I-75 TO US 25                           |                |          |
| 62         | FAYETTE  | LOCAL      | 2.6  | STP  | (RICHMOND RD) IN LEXINGTON                            | \$12,000       | Н        |
|            |          |            |      |      | MAN O WAR BLVD - MAJOR<br>WIDENING FROM US 25         |                |          |
|            |          |            |      |      | (RICHMOND RD) TO                                      |                |          |
|            | _        | 1.0041     | 0.5  | 0.75 | ARMSTRONG MILL RD IN                                  | <b>#40.000</b> |          |
| 63         | FAYETTE  | LOCAL      | 2.5  | STP  | LEXINGTON   | \$12,000       | M        |

|     |                | <del></del> |            |       | MAN O WAR BLVD - MAJOR      |                |  |
|-----|----------------|-------------|------------|-------|-----------------------------|----------------|--|
|     |                |             |            |       | WIDENING FROM ARMSTRONG     |                |  |
|     |                |             |            |       | MILL RD TO KY 1974 (TATES   |                |  |
| 64  | FAYETTE        | LOCAL       | 1.5        | STP   | CREEK RD) IN LEXINGTON      | \$6,000        | М  |
|     |                |             |            |       | MAN O WAR BLVD - MAJOR      |                |  |
|     |                |             |            |       | WIDENING FROM KY 1974       |                |  |
|     |                |             |            |       | (TATES CREEK RD) TO US 27   |                |  |
|     |                |             |            |       | (NICHOLASVILLE RD) IN       |                |  |
| 65  | <b>FAYETTE</b> | LOCAL       | 2.0        | STP   | LEXINGTON                   | \$7,900        | M  |
|     |                |             |            |       | TRADE CENTER DR - MAJOR     |                | _  |
|     |                |             |            |       | WIDENING FROM KY 4 TO       |                |  |
| 66  | <b>FAYETTE</b> | LOCAL       | 0.4        | NFA   | FORTUNE DR IN LEXINGTON     | \$800          | L  |
|     |                |             |            |       | BOARDWALK/PARK PLACE -      |                | _  |
|     |                |             |            |       | MAJOR WIDENING FROM KY 4    |                |  |
|     |                |             |            |       | TO KY 353 (RUSSELL CAVE RD) |                |  |
| 67  | FAYETTE        | LOCAL       | 0.4        | NFA   | IN LEXINGTON                | \$800          | <u>L</u>                                     |
|     |                |             |            |       | TODDS RD - MAJOR WIDENING   |                |  |
|     |                |             |            |       | FROM CODELL DR TO MAN O     |                |  |
| 68  | FAYETTE        | LOCAL       | 1.6        | STP   | WAR BLVD IN LEXINGTON       | \$4,700        | M  |
|     |                |             |            |       | LANE ALLEN RD - MAJOR       |                |  |
|     |                |             |            |       | WIDENING FROM GARDEN        |                |  |
|     |                |             |            |       | SPRINGS DR TO US 68         |                |  |
|     |                |             |            |       | (HARRODSBURG RD) IN         |                |  |
| 69  | FAYETTE        | LOCAL       | 0.4        | STP   | LEXINGTON                   | \$900          | L  |
|     |                |             |            |       | MERCER RD/NANDINO BLVD -    |                |  |
|     |                |             |            |       | MAJOR WIDENING FROM         |                |  |
|     |                |             |            |       | GREENDALE RD TO KY 922      |                |  |
|     |                |             |            |       | (NEWTOWN PIKE) IN           |                |  |
| 70  | FAYETTE        | LOCAL       | 2.5        | STP   | LEXINGTON                   | \$5,700        | L  |
|     |                |             |            |       | YELLOWSTONE PKY - MAJOR     |                |  |
|     |                |             |            |       | WIDENING FROM MT TABOR RD   | <b>.</b>       | _  |
| 71  | FAYETTE        | LOCAL       | 0.1        | STP   | TO ALUMNI DR IN LEXINGTON   | \$500          | L  |
|     |                |             |            |       | RIO DOSA DR - MAJOR         |                |  |
|     |                |             |            |       | WIDENING FROM LOCUST HILL   |                |  |
|     |                |             | <b>.</b> . |       | DR TO MAN O WAR BLVD IN     |                | _  |
| 72  | FAYETTE        | LOCAL       | 0.1        | NFA   | LEXINGTON                   | \$1,400        | L  |
|     |                |             |            |       | SOUTHLAND DR - MAJOR        |                |  |
|     |                |             |            |       | WIDENING TO 5 LANES FROM    |                |  |
|     |                |             |            |       | ROSEMONT GARDEN TO          |                |  |
|     |                |             |            |       | NICHOLASVILLE RD (US 27) IN |                |  |
|     |                |             |            |       | LEXINGTON. (INCLUDES NEW    |                |  |
|     | _              | 1.0041      | 4.0        | 075   | RR BRIDGE AT NORFOLK-       | <b>60 500</b>  |  |
| 73_ | FAYETTE        | LOCAL       | 1.0        | STP   | SOUTHERN RR)                | \$6,500        | <u>      L                              </u> |
|     |                |             |            |       | MASON HEADLEY RD -          |                |  |
|     |                |             |            |       | CONSTRUCT LEFT TURN LANES   |                |  |
| 7.4 | <b>C</b>       | 1.0041      | 0.4        | OTD.  | AT BEACON HILL RD IN        | <b>#</b> 500   | p  |
| 74_ | FAYETTE        | LOCAL       | 0.1        | STP   | LEXINGTON                   | \$500          | <u> </u>                                     |
|     |                |             |            |       | MASON HEADLEY RD / WALLER   |                |  |
|     |                |             |            |       | AVE - MAJOR WIDENING FROM   |                |  |
| 75  | EAVETTE        | 1.0041      | 0.5        | OTD.  | SHAKER DR TO ROYALTY        | <b>ሰላ ዕ</b> ደር | <b>5.</b> 4                                  |
| 75_ | FAYETTE        | LOCAL       | 0.5        | STP   | COURT IN LEXINGTON          | \$1,850        | <u> </u>                                     |
|     |                |             |            |       | LOWRY LANE - CONSTRUCT A    |                |  |
|     |                |             |            |       | RIGHT TURN LANE FROM        |                |  |
| 70  | <b>C</b>       | 1.0041      | 0.4        | NIE A | EASTBOUND LOWRY LANE        | <b>0440</b>    | p.a  |
| 76  | FAYETTE        | LOCAL       | 0.1        | NFA   | ONTO NICHOLASVILLE RD       | \$140          | <u> </u>                                     |
|     |                |             |            |       | KIRKLEVINGTON DR -          |                |  |
|     |                |             |            |       | RELOCATE KIRKLEVINGTON DR   |                |  |
| 77  | EAVETTE        | 1.0041      | 0.2        | NIE A | TO INTERSECT TATES CREEK    | ¢4 000         |  |
| 77  | FAYETTE        | LOCAL       | 0.2        | NFA   | RD AT GAINESWAY DR          | \$1,000        | L  |

|     |                                      |        |                 |          | OLD MT TABOR RD - WIDEN      |                |             |
|-----|--------------------------------------|--------|-----------------|----------|------------------------------|----------------|-------------|
|     |                                      |        |                 |          | OLD MT TABOR RD FROM         |                |             |
|     |                                      |        |                 |          | TATES CREEK RD TO ALUMNI     |                |             |
| 78  | FAYETTE                              | LOCAL  | 0.5             | NFA      | DR IN LEXINGTON              | \$1,600        | <u>L</u>    |
|     |                                      |        |                 |          | MEADOW LANE - CONSTRUCT      |                |             |
|     |                                      |        |                 |          | TURN LANE ON SOUTHBOUND      |                |             |
|     |                                      |        |                 |          | MEADOW LANE AT NEW CIRCLE    |                |             |
| 79  | FAYETTE                              | LOCAL  | 0.1             | STP      | RD                           | \$80           | M           |
| -   |                                      |        |                 |          | LIBERTY/LOUDON/7TH ST        |                |             |
| 80  | FAYETTE                              | LOCAL  | 0.5             | STP      | CONNECTOR IN LEXINGTON       | \$1,300        | L           |
| -   |                                      |        |                 |          | LIBERTY RD - MAJOR WIDINING  | . ,            | -           |
|     |                                      |        |                 |          | FROM US 60 (WINCHESTER RD)   |                |             |
|     |                                      |        |                 |          | TO HENRY CLAY BLVD IN        |                |             |
| 81  | FAYETTE                              | LOCAL  | 0.6             | STP      | LEXINGTON                    | \$3,000        | L           |
|     | .,                                   |        |                 |          | NEW CONNECTOR FROM           | Ψο,σοσ         |             |
|     |                                      |        |                 |          | PALUMBO DR TO LIBERTY RD     |                |             |
| 82  | FAYETTE                              | LOCAL  | 0.5             | STP      | IN LEXINGTON                 | \$3,150        | М           |
|     | IAILIIL                              | LOUAL  | 0.5             | 011      | LANSDOWNE DR - MAJOR         | ψ5, 150        | 141         |
|     |                                      |        |                 |          | WIDENING FROM MALABU DR      |                |             |
|     |                                      |        |                 |          | TO WILSON DOWNING DR IN      |                |             |
| 83  | FAYETTE                              | 1004   | 1 1             | STP      |                              | ¢4 500         | L           |
|     | FAIELLE                              | LOCAL  | 1.1             | 317      | LEXINGTON MA IOD             | \$1,500        | <u> </u>    |
|     |                                      |        |                 |          | WALTON AVE - MAJOR           |                |             |
|     | _                                    | 1.004  | ٥.5             | OT-      | WIDENING FROM MAIN ST TO     | <b>#</b> 0.000 |             |
| 84  | FAYETTE                              | LOCAL  | 0.5             | STP      | MIDLAND AVE IN LEXINGTON     | \$2,000        | L           |
|     |                                      |        |                 |          | NORTH UPPER ST/NORTH         |                |             |
|     |                                      |        |                 |          | LIMESTONE ST CONNECTOR IN    |                |             |
| 85  | FAYETTE                              | LOCAL  | 0.1             | NFA      | LEXINGTON                    | \$1,350        | L           |
|     |                                      |        |                 |          | CHINOE RD - CONSTRUCT LEFT   |                | _           |
|     |                                      |        |                 |          | TURN LANES AT COOPER DR IN   |                |             |
| 86  | FAYETTE                              | LOCAL  | 0.1             | STP      | LEXINGTON                    | \$500          | M           |
|     |                                      |        |                 |          | SOUTH LIMESTONE - WIDEN TO   |                |             |
|     |                                      |        |                 |          | 3 LANES FROM PINE ST TO      |                |             |
| 87  | FAYETTE                              | LOCAL  | 0.4             | STP      | BARR ST IN LEXINGTON         | \$3,900        | M           |
|     |                                      |        |                 |          | SANDERSVILLE RD - REPLACE    |                |             |
|     |                                      |        |                 |          | RAILROAD OVERPASS IN         |                |             |
| 88  | FAYETTE                              | LOCAL  | 0.2             | STP      | LEXINGTON                    | \$8,500        | L           |
|     |                                      |        |                 | <u> </u> | SANDERSVILLE RD -            | 70,000         |             |
|     |                                      |        |                 |          | EXTENSION FROM GREENDALE     |                |             |
|     |                                      |        |                 |          | RD TO CITATION BLVD IN       |                |             |
| 89  | FAYETTE                              | LOCAL  | 0.4             | STP      | LEXINGTON                    | \$1,500        | L           |
|     | IAILIIL                              | LOUAL  | U. <del>T</del> | 011      | OLD HIGBEE MILL RD - WIDEN   | ψ1,500         | <u> </u>    |
|     |                                      |        |                 |          |                              |                |             |
| 00  | EAVETTE                              | 1.004  | 0.2             | OTD.     | AND ALIGN AT US 68 IN        | ቀኃርር           | <b>5.</b> 4 |
| 90_ | FAYETTE                              | LOCAL  | 0.2             | STP      | LEXINGTON STAR SHOOT PARKWAY | \$390          | M           |
|     |                                      |        |                 |          | STAR SHOOT PARKWAY -         |                |             |
| 0.4 | $\Gamma \Lambda V \Gamma T T \Gamma$ | 1.0041 | 0.4             | OTO      | EXTENSION TO LIBERTY RD IN   | <b>#0.000</b>  | R.S         |
| 91  | FAYETTE                              | LOCAL  | 0.4             | STP      | LEXINGTON                    | \$2,000        | <u> </u>    |
|     |                                      |        |                 |          | MAIN STREET - MAJOR          |                |             |
|     |                                      |        |                 |          | WIDENING FROM US 27 S OF     |                |             |
|     |                                      |        |                 |          | NICHOLASVILLE TO             |                |             |
|     |                                      |        |                 |          | EDGEWOOD DR IN               | _              |             |
| 92  | JESSAMINE                            | US 27X | 1.3             | STP      | NICHOLASVILLE                | \$7,000        | M           |
|     |                                      |        |                 |          | MAIN STREET - RECONSTRUCT    |                |             |
|     |                                      |        |                 |          | WITH NEW CURB, GUTTER AND    |                |             |
|     |                                      |        |                 |          | IMPROVED DRAINAGE FROM       |                |             |
|     |                                      |        |                 |          | BROWN ST TO 0.2 MI S OF      |                |             |
|     |                                      |        |                 |          | ORCHARD ST IN                |                |             |
| 93  | <b>JESSAMINE</b>                     | US 27X | 1.0             | STP      | NICHOLASVILLE                | \$2,000        | M           |
|     |                                      |        |                 |          | MAIN STREET - MAJOR          |                |             |
|     |                                      |        |                 |          | WIDENING TO 5 LANES FROM     |                |             |
|     |                                      |        |                 |          | 0.2 MI S OF ORCHARD ST TO US |                |             |
| 94  | JESSAMINE                            | US 27X | 0.9             | STP      | 27 N OF NICHOLASVILLE        | \$1,800        | M           |
|     | J,, 1                                |        | 3.5             | <u> </u> |                              | Ţ.,OOO         |             |

|      |                        |        |     |               | MAJOR WIDENING TO 6 THRU   |                      |          |
|------|------------------------|--------|-----|---------------|--|----------------------|----------|
|      |                        |        |     |               | LANES WITH SERVICE ROADS   |                      |          |
|      |                        |        |     |               | FROM US 27 N OF  |                      |          |
|      |                        |        |     |               | NICHOLASVILLE NEAR   |                      |          |
|      |                        |        |     |               | GROGGINS FERRY RD TO KY  |                      |          |
|      |                        |        |     |               | 1980. SEE SEGMENTS 22 THRU   |                      |          |
|      |                        |        |     |               |  |                      |          |
|      |                        |        |     |               | 27 IN AUGUST, 1998 ADVANCE   |                      |          |
| 95_  | JESSAMINE              | US 27  | 3.5 | NHS           | PLANNING STUDY.  | \$69,500             | M        |
|      |                        |        |     |               | MAJOR WIDENING TO 6 THRU   |                      |          |
|      |                        |        |     |               | LANES FROM KY 1980 TO MAN  |                      |          |
|      |                        |        |     |               | O' WAR BLVD. SEE SEGMENT 28  |                      |          |
|      |                        |        |     |               | IN AUGUST, 1998 ADVANCE  |                      |          |
| 96   | JESSAMINE              | US 27  | 1.4 | NHS           | PLANNING STUDY.  | \$10,300             | Н        |
| -    |                        |        |     |               | CONSTRUCT PARALLEL   | . ,                  |          |
|      |                        |        |     |               | SERVICE ROADS ALONG  |                      |          |
|      |                        |        |     |               | NICHOLASVILLE ROAD FROM  |                      |          |
|      |                        |        |     |               | US 27X N OF NICHOLASVILLE  |                      |          |
|      |                        |        |     |               |  |                      |          |
|      | IEOO A NAINIE          |        | 0.4 | <b>NII 10</b> | TO WILSON DOWNING RD AT  | 000 000              |          |
| 97   | JESSAMINE              | US 27  | 6.1 | NHS           | FAYETTE MALL   | \$20,000             | н        |
|      |                        |        |     |               | RECONSTRUCT INTERSECTION   |                      |          |
| 98   | JESSAMINE              | US 68  | 0.7 | STP           | AT KY 29 N OF WILMORE  | \$2,000              | M        |
|      |                        |        |     |               | RECONSTRUCTION FROM KY 29  |                      |          |
|      |                        |        |     |               | N OF WILMORE TO 4800 FEET S  |                      |          |
|      |                        |        |     |               | OF BRANNON RD. SEE   |                      |          |
|      |                        |        |     |               | SEGMENTS 1b, 1c, & 1d IN   |                      |          |
|      |                        |        |     |               | AUGUST, 1998 ADVANCE   |                      |          |
|      |                        |        |     |               | PLANNING STUDY. ADDITIONAL   |                      |          |
|      |                        |        |     |               | FUNDS NEEDED IN ADDITION   |                      |          |
|      |                        |        |     |               |  |                      |          |
| 00   | IECC A MAINIE          | 110.00 | 0.0 | OTD           | TO FUNDS SCHEDULED IN 6YP  | <b>#0.000</b>        |          |
| 99   | JESSAMINE              | US 68  | 6.0 | STP           | ITEM 07-318.01.  | \$9,000              | <u>H</u> |
|      |                        |        |     |               | RECONSTRUCTION FROM KY 29  |                      |          |
|      |                        |        |     |               | NEAR WILMORE TO KY 33 AT   |                      |          |
| 100  | JESSAMINE              | US 68  | 9.5 | STP           | SHAKERTOWN   | \$33,900             | M        |
|      |                        |        |     |               | RECONSTRUCT INTERSECTION   |                      |          |
|      |                        |        |     |               |  |                      |          |
| _101 | JESSAMINE              | US 68  | 0.6 | STP           | AT KY 1268   | \$1,200              | M        |
| 101  | JESSAMINE              | US 68  | 0.6 | STP           | AT KY 1268 NICHOLASVILLE EASTERN   | \$1,200              | M        |
| 101  | JESSAMINE              | US 68  | 0.6 | STP           | AT KY 1268 NICHOLASVILLE EASTERN BYPASS SECTION I - NEW  | \$1,200              | M        |
| 101  | JESSAMINE              | US 68  | 0.6 | STP           | AT KY 1268 NICHOLASVILLE EASTERN   | \$1,200              | M        |
| 101  | JESSAMINE              | US 68  | 0.6 | STP           | AT KY 1268 NICHOLASVILLE EASTERN BYPASS SECTION I - NEW  | \$1,200              | M        |
| 101  | JESSAMINE              | US 68  | 0.6 | STP           | AT KY 1268  NICHOLASVILLE EASTERN BYPASS SECTION I - NEW CONSTRUCTION FROM US 27 N   | \$1,200              | <u>M</u> |
| 101  | JESSAMINE              | US 68  | 0.6 | STP           | AT KY 1268  NICHOLASVILLE EASTERN  BYPASS SECTION I - NEW  CONSTRUCTION FROM US 27 N  OF NICHOLASVILLE EXTENDING   | \$1,200              | M        |
| 101  | JESSAMINE              | US 68  | 0.6 | STP           | AT KY 1268  NICHOLASVILLE EASTERN  BYPASS SECTION I - NEW  CONSTRUCTION FROM US 27 N  OF NICHOLASVILLE EXTENDING  SOUTHEASTERLY TO KY 39.  | \$1,200              | M        |
| 101  | JESSAMINE              | US 68  | 0.6 | STP           | AT KY 1268  NICHOLASVILLE EASTERN  BYPASS SECTION I - NEW  CONSTRUCTION FROM US 27 N  OF NICHOLASVILLE EXTENDING  SOUTHEASTERLY TO KY 39.  ADDITIONAL FUNDS NEEDED IN  ADDITION TO FUNDS   | \$1,200              | M        |
|      |                        |        |     |               | AT KY 1268  NICHOLASVILLE EASTERN BYPASS SECTION I - NEW CONSTRUCTION FROM US 27 N OF NICHOLASVILLE EXTENDING SOUTHEASTERLY TO KY 39. ADDITIONAL FUNDS NEEDED IN ADDITION TO FUNDS SCHEDULED IN 6YP ITEMS 07-  |                      |          |
|      | JESSAMINE<br>JESSAMINE | US 68  | 0.6 | STP           | AT KY 1268  NICHOLASVILLE EASTERN BYPASS SECTION I - NEW CONSTRUCTION FROM US 27 N OF NICHOLASVILLE EXTENDING SOUTHEASTERLY TO KY 39. ADDITIONAL FUNDS NEEDED IN ADDITION TO FUNDS SCHEDULED IN 6YP ITEMS 07- 87.10, 87.11 AND 87.12.  | \$1,200<br>\$38,700  | M<br>H   |
|      |                        |        |     |               | AT KY 1268  NICHOLASVILLE EASTERN BYPASS SECTION I - NEW CONSTRUCTION FROM US 27 N OF NICHOLASVILLE EXTENDING SOUTHEASTERLY TO KY 39. ADDITIONAL FUNDS NEEDED IN ADDITION TO FUNDS SCHEDULED IN 6YP ITEMS 07- 87.10, 87.11 AND 87.12.  NICHOLASVILLE EASTERN   |                      |          |
|      |                        |        |     |               | AT KY 1268  NICHOLASVILLE EASTERN BYPASS SECTION I - NEW CONSTRUCTION FROM US 27 N OF NICHOLASVILLE EXTENDING SOUTHEASTERLY TO KY 39. ADDITIONAL FUNDS NEEDED IN ADDITION TO FUNDS SCHEDULED IN 6YP ITEMS 07- 87.10, 87.11 AND 87.12.  NICHOLASVILLE EASTERN BYPASS SECTION II - NEW   |                      |          |
|      |                        |        |     |               | AT KY 1268  NICHOLASVILLE EASTERN BYPASS SECTION I - NEW CONSTRUCTION FROM US 27 N OF NICHOLASVILLE EXTENDING SOUTHEASTERLY TO KY 39. ADDITIONAL FUNDS NEEDED IN ADDITION TO FUNDS SCHEDULED IN 6YP ITEMS 07- 87.10, 87.11 AND 87.12.  NICHOLASVILLE EASTERN BYPASS SECTION II - NEW CONSTRUCTION FROM KY 39   |                      |          |
| 102  | JESSAMINE              | NEW    | 4.3 | NHS           | AT KY 1268  NICHOLASVILLE EASTERN BYPASS SECTION I - NEW CONSTRUCTION FROM US 27 N OF NICHOLASVILLE EXTENDING SOUTHEASTERLY TO KY 39. ADDITIONAL FUNDS NEEDED IN ADDITION TO FUNDS SCHEDULED IN 6YP ITEMS 07- 87.10, 87.11 AND 87.12.  NICHOLASVILLE EASTERN BYPASS SECTION II - NEW CONSTRUCTION FROM KY 39 EXTENDING SOUTHEASTERLY   | \$38,700             | Н        |
| 102  |                        |        |     |               | AT KY 1268  NICHOLASVILLE EASTERN BYPASS SECTION I - NEW CONSTRUCTION FROM US 27 N OF NICHOLASVILLE EXTENDING SOUTHEASTERLY TO KY 39. ADDITIONAL FUNDS NEEDED IN ADDITION TO FUNDS SCHEDULED IN 6YP ITEMS 07- 87.10, 87.11 AND 87.12.  NICHOLASVILLE EASTERN BYPASS SECTION II - NEW CONSTRUCTION FROM KY 39 EXTENDING SOUTHEASTERLY TO US 27 S OF NICHOLASVILLE.  |                      |          |
| 102  | JESSAMINE              | NEW    | 4.3 | NHS           | AT KY 1268  NICHOLASVILLE EASTERN BYPASS SECTION I - NEW CONSTRUCTION FROM US 27 N OF NICHOLASVILLE EXTENDING SOUTHEASTERLY TO KY 39. ADDITIONAL FUNDS NEEDED IN ADDITION TO FUNDS SCHEDULED IN 6YP ITEMS 07- 87.10, 87.11 AND 87.12.  NICHOLASVILLE EASTERN BYPASS SECTION II - NEW CONSTRUCTION FROM KY 39 EXTENDING SOUTHEASTERLY TO US 27 S OF NICHOLASVILLE. CONSTRUCT A PARALLEL   | \$38,700             | Н        |
| 102  | JESSAMINE              | NEW    | 4.3 | NHS           | AT KY 1268  NICHOLASVILLE EASTERN BYPASS SECTION I - NEW CONSTRUCTION FROM US 27 N OF NICHOLASVILLE EXTENDING SOUTHEASTERLY TO KY 39. ADDITIONAL FUNDS NEEDED IN ADDITION TO FUNDS SCHEDULED IN 6YP ITEMS 07- 87.10, 87.11 AND 87.12.  NICHOLASVILLE EASTERN BYPASS SECTION II - NEW CONSTRUCTION FROM KY 39 EXTENDING SOUTHEASTERLY TO US 27 S OF NICHOLASVILLE. CONSTRUCT A PARALLEL LIMITED ACCESS MULTI-LANE   | \$38,700             | Н        |
| 102  | JESSAMINE              | NEW    | 4.3 | NHS           | AT KY 1268  NICHOLASVILLE EASTERN BYPASS SECTION I - NEW CONSTRUCTION FROM US 27 N OF NICHOLASVILLE EXTENDING SOUTHEASTERLY TO KY 39. ADDITIONAL FUNDS NEEDED IN ADDITION TO FUNDS SCHEDULED IN 6YP ITEMS 07- 87.10, 87.11 AND 87.12.  NICHOLASVILLE EASTERN BYPASS SECTION II - NEW CONSTRUCTION FROM KY 39 EXTENDING SOUTHEASTERLY TO US 27 S OF NICHOLASVILLE. CONSTRUCT A PARALLEL LIMITED ACCESS MULTI-LANE NORTH-SOUTH ARTERIAL  | \$38,700             | Н        |
| 102  | JESSAMINE              | NEW    | 4.3 | NHS           | AT KY 1268  NICHOLASVILLE EASTERN BYPASS SECTION I - NEW CONSTRUCTION FROM US 27 N OF NICHOLASVILLE EXTENDING SOUTHEASTERLY TO KY 39. ADDITIONAL FUNDS NEEDED IN ADDITION TO FUNDS SCHEDULED IN 6YP ITEMS 07- 87.10, 87.11 AND 87.12.  NICHOLASVILLE EASTERN BYPASS SECTION II - NEW CONSTRUCTION FROM KY 39 EXTENDING SOUTHEASTERLY TO US 27 S OF NICHOLASVILLE. CONSTRUCT A PARALLEL LIMITED ACCESS MULTI-LANE   | \$38,700             | Н        |
| 102  | JESSAMINE              | NEW    | 4.3 | NHS           | AT KY 1268  NICHOLASVILLE EASTERN BYPASS SECTION I - NEW CONSTRUCTION FROM US 27 N OF NICHOLASVILLE EXTENDING SOUTHEASTERLY TO KY 39. ADDITIONAL FUNDS NEEDED IN ADDITION TO FUNDS SCHEDULED IN 6YP ITEMS 07- 87.10, 87.11 AND 87.12.  NICHOLASVILLE EASTERN BYPASS SECTION II - NEW CONSTRUCTION FROM KY 39 EXTENDING SOUTHEASTERLY TO US 27 S OF NICHOLASVILLE. CONSTRUCT A PARALLEL LIMITED ACCESS MULTI-LANE NORTH-SOUTH ARTERIAL  | \$38,700             | Н        |
| 102  | JESSAMINE              | NEW    | 4.3 | NHS           | AT KY 1268  NICHOLASVILLE EASTERN BYPASS SECTION I - NEW CONSTRUCTION FROM US 27 N OF NICHOLASVILLE EXTENDING SOUTHEASTERLY TO KY 39. ADDITIONAL FUNDS NEEDED IN ADDITION TO FUNDS SCHEDULED IN 6YP ITEMS 07- 87.10, 87.11 AND 87.12.  NICHOLASVILLE EASTERN BYPASS SECTION II - NEW CONSTRUCTION FROM KY 39 EXTENDING SOUTHEASTERLY TO US 27 S OF NICHOLASVILLE. CONSTRUCT A PARALLEL LIMITED ACCESS MULTI-LANE NORTH-SOUTH ARTERIAL CONNECTOR FROM THE   | \$38,700             | Н        |
| 102  | JESSAMINE              | NEW    | 4.3 | NHS           | AT KY 1268  NICHOLASVILLE EASTERN BYPASS SECTION I - NEW CONSTRUCTION FROM US 27 N OF NICHOLASVILLE EXTENDING SOUTHEASTERLY TO KY 39. ADDITIONAL FUNDS NEEDED IN ADDITION TO FUNDS SCHEDULED IN 6YP ITEMS 07- 87.10, 87.11 AND 87.12.  NICHOLASVILLE EASTERN BYPASS SECTION II - NEW CONSTRUCTION FROM KY 39 EXTENDING SOUTHEASTERLY TO US 27 S OF NICHOLASVILLE. CONSTRUCT A PARALLEL LIMITED ACCESS MULTI-LANE NORTH-SOUTH ARTERIAL CONNECTOR FROM THE NORTH NICHOLASVILLE   | \$38,700             | Н        |
| 102  | JESSAMINE              | NEW    | 4.3 | NHS           | AT KY 1268  NICHOLASVILLE EASTERN BYPASS SECTION I - NEW CONSTRUCTION FROM US 27 N OF NICHOLASVILLE EXTENDING SOUTHEASTERLY TO KY 39. ADDITIONAL FUNDS NEEDED IN ADDITION TO FUNDS SCHEDULED IN 6YP ITEMS 07- 87.10, 87.11 AND 87.12.  NICHOLASVILLE EASTERN BYPASS SECTION II - NEW CONSTRUCTION FROM KY 39 EXTENDING SOUTHEASTERLY TO US 27 S OF NICHOLASVILLE. CONSTRUCT A PARALLEL LIMITED ACCESS MULTI-LANE NORTH-SOUTH ARTERIAL CONNECTOR FROM THE NORTH NICHOLASVILLE BYPASS TO NEW CIRCLE RD   | \$38,700             | Н        |
| 102  | JESSAMINE              | NEW    | 4.3 | NHS           | AT KY 1268  NICHOLASVILLE EASTERN BYPASS SECTION I - NEW CONSTRUCTION FROM US 27 N OF NICHOLASVILLE EXTENDING SOUTHEASTERLY TO KY 39. ADDITIONAL FUNDS NEEDED IN ADDITION TO FUNDS SCHEDULED IN 6YP ITEMS 07- 87.10, 87.11 AND 87.12.  NICHOLASVILLE EASTERN BYPASS SECTION II - NEW CONSTRUCTION FROM KY 39 EXTENDING SOUTHEASTERLY TO US 27 S OF NICHOLASVILLE. CONSTRUCT A PARALLEL LIMITED ACCESS MULTI-LANE NORTH-SOUTH ARTERIAL CONNECTOR FROM THE NORTH NICHOLASVILLE BYPASS TO NEW CIRCLE RD ALONG AND WEST OF THE   | \$38,700             | Н        |
| 102  | JESSAMINE              | NEW    | 2.7 | NHS           | NICHOLASVILLE EASTERN BYPASS SECTION I - NEW CONSTRUCTION FROM US 27 N OF NICHOLASVILLE EXTENDING SOUTHEASTERLY TO KY 39. ADDITIONAL FUNDS NEEDED IN ADDITION TO FUNDS SCHEDULED IN 6YP ITEMS 07- 87.10, 87.11 AND 87.12. NICHOLASVILLE EASTERN BYPASS SECTION II - NEW CONSTRUCTION FROM KY 39 EXTENDING SOUTHEASTERLY TO US 27 S OF NICHOLASVILLE. CONSTRUCT A PARALLEL LIMITED ACCESS MULTI-LANE NORTH-SOUTH ARTERIAL CONNECTOR FROM THE NORTH NICHOLASVILLE BYPASS TO NEW CIRCLE RD ALONG AND WEST OF THE SOUTHERN RAILROAD                                    | \$38,700<br>\$23,200 | H<br>H   |
| 102  | JESSAMINE              | NEW    | 2.7 | NHS           | NICHOLASVILLE EASTERN BYPASS SECTION I - NEW CONSTRUCTION FROM US 27 N OF NICHOLASVILLE EXTENDING SOUTHEASTERLY TO KY 39. ADDITIONAL FUNDS NEEDED IN ADDITION TO FUNDS SCHEDULED IN 6YP ITEMS 07- 87.10, 87.11 AND 87.12. NICHOLASVILLE EASTERN BYPASS SECTION II - NEW CONSTRUCTION FROM KY 39 EXTENDING SOUTHEASTERLY TO US 27 S OF NICHOLASVILLE. CONSTRUCT A PARALLEL LIMITED ACCESS MULTI-LANE NORTH-SOUTH ARTERIAL CONNECTOR FROM THE NORTH NICHOLASVILLE BYPASS TO NEW CIRCLE RD ALONG AND WEST OF THE SOUTHERN RAILROAD CORRIDOR NEW NICHOLASVILLE TO I-75 | \$38,700<br>\$23,200 | H<br>H   |
| 102  | JESSAMINE              | NEW    | 2.7 | NHS           | NICHOLASVILLE EASTERN BYPASS SECTION I - NEW CONSTRUCTION FROM US 27 N OF NICHOLASVILLE EXTENDING SOUTHEASTERLY TO KY 39. ADDITIONAL FUNDS NEEDED IN ADDITION TO FUNDS SCHEDULED IN 6YP ITEMS 07- 87.10, 87.11 AND 87.12. NICHOLASVILLE EASTERN BYPASS SECTION II - NEW CONSTRUCTION FROM KY 39 EXTENDING SOUTHEASTERLY TO US 27 S OF NICHOLASVILLE. CONSTRUCT A PARALLEL LIMITED ACCESS MULTI-LANE NORTH-SOUTH ARTERIAL CONNECTOR FROM THE NORTH NICHOLASVILLE BYPASS TO NEW CIRCLE RD ALONG AND WEST OF THE SOUTHERN RAILROAD CORRIDOR                           | \$38,700<br>\$23,200 | H<br>H   |

| Î.   |                                |                          |             |  |  |             |
|--|--------------------------------|--------------------------|-------------|--|--|-------------|
|  |                                |                          |             | RECONSTRUCTION FROM  |  |             |
|  |                                |                          |             | WILMORE CITY LIMITS TO US 68   |  |             |
|  |                                |                          |             | TO CORRECT INADEQUATE  |  |             |
|  |                                |                          |             | SIGHT DISTANCE CREATED BY  |  |             |
| _106 JESSAMINE   | KY 29                          | 1.7                      | STP         | CREST VERTICAL CURVES  | \$7,000                                    | М           |
|  |                                |                          |             | MAJOR WIDENING FROM US 68  |  |             |
|  |                                |                          |             | TO NICHOLASVILLE BYPASS  |  |             |
| 107 JESSAMINE  | KY 29                          | 2.4                      | STP         | (US 27)  | \$9,000                                    | M           |
|  |                                |                          |             | MAPLÉ AVENUE - MAJOR   | . ,  |             |
|  |                                |                          |             | WIDENING FROM  |  |             |
|  |                                |                          |             | NICHOLASVILLE BYPASS (US   |  |             |
|  |                                |                          |             | 27) TO SOUTHERN RR IN  |  |             |
| 108 JESSAMINE  | KY 29                          | 0.6                      | STP         | NICHOLASVILLE  | \$2,700                                    | М           |
|  |                                |                          |             | MAPLE AVENUE - MAJOR   | <del>,</del> ,                             |             |
|  |                                |                          |             | WIDENING FROM SOUTHERN   |  |             |
|  |                                |                          |             | RR TO MAIN STREET IN   |  |             |
| 109 JESSAMINE  | KY 29                          | 0.7                      | STP         | NICHOLASVILLE  | \$9,500                                    | М           |
|  |                                |                          |             | RECONSTRUCT SLIDE AREA   | T-,  |             |
| 110 JESSAMINE  | KA 50                          | 0.7                      | NIE A       |  | ¢1 400                                     | R.A         |
| 110 JESSAMINE  | KY 39                          | 0.7                      | NFA         | FROM POLLARD RD TO KY 1268   | \$1,400                                    | M           |
|  |                                |                          |             | SULPHUR WELL RD - MAJOR  |  |             |
|  |                                |                          |             | WIDENING FROM US 27X (MAIN   |  |             |
|  |                                |                          |             | ST) TO PROPOSED  |  |             |
| 111 IECCANAINIE  | I/X/ 20                        | 4.0                      | CTD         | NICHOLASVILLE EASTERN  | <b>ድድ ዕ</b> ዕዕ                             | R.A         |
| 111 JESSAMINE  | KY 39                          | 1.0                      | STP         | BYPASS   | \$5,000                                    | M           |
|  |                                |                          |             | RECONSTRUCT INTERSECTION   |  |             |
|  |                                |                          |             | AT MAPLELEAF AND MILES RD  |  |             |
|  |                                |                          |             | TO IMPROVE SIGHT DISTANCE  |  |             |
| 440 1500 4 14 15   | 1674.00                        | 0.4                      | OTD         | AND TO REALIGN MAPLELEAF   | <b>0.1.100</b>                             |             |
| 112 JESSAMINE  | KY 39                          | 0.1                      | STP         | WITH MILES RD  | \$1,100                                    | M           |
| 440 1500 4 14 15 15  | 101.00                         | 4.0                      | OTD         | MAJOR WIDENING FROM KY   | <b>#</b> 0.000                             |             |
| 113 JESSAMINE  | KY 39                          | 1.3                      | STP         | 1541 TO MILES RD   | \$3,900                                    | M           |
|  |                                |                          |             | NORTH 3RD ST/KEENE RD -  |  |             |
|  |                                |                          |             | MAJOR WIDENING FROM OAK  |  |             |
| 444 1500444115   | 107.400                        | 4 -                      | 0.70        | ST TO US 27 (NICHOLASVILLE   | <b>*</b> 4 <b>=</b> 0 0                    |             |
| 114 JESSAMINE  | KY 169                         | 1.5                      | STP         | BYPASS) IN NICHOLASVILLE   | \$4,500                                    | L           |
|  |                                |                          |             | NORTH 3RD ST/KEENE RD -  |  |             |
|  |                                |                          |             | CONSTRUCT PEDESTRIAN   |  |             |
|  |                                |                          |             |  |  |             |
|  |                                |                          |             | SIDEWALKS ALONG THE  |  |             |
|  | 1044                           |                          | a=-         | SIDEWALKS ALONG THE<br>BRIDGE OVER SOUTHERN  |  |             |
| 115 JESSAMINE  | KY 169                         | 0.2                      | STP         | SIDEWALKS ALONG THE<br>BRIDGE OVER SOUTHERN<br>RAILROAD IN NICHOLASVILLE   | \$60                                       | М           |
| 115 JESSAMINE  | KY 169                         | 0.2                      | STP         | SIDEWALKS ALONG THE BRIDGE OVER SOUTHERN RAILROAD IN NICHOLASVILLE KEENE RD - MAJOR WIDENING   | \$60                                       | M           |
| 115 JESSAMINE  | KY 169                         | 0.2                      | STP         | SIDEWALKS ALONG THE BRIDGE OVER SOUTHERN RAILROAD IN NICHOLASVILLE KEENE RD - MAJOR WIDENING FROM US 27 (NICHOLASVILLE   | \$60                                       | M           |
|  |                                |                          |             | SIDEWALKS ALONG THE BRIDGE OVER SOUTHERN RAILROAD IN NICHOLASVILLE KEENE RD - MAJOR WIDENING FROM US 27 (NICHOLASVILLE BYPASS) TO 0.5 W OF US 27 IN  |  |             |
| 115 JESSAMINE  116 JESSAMINE                               | KY 169<br>KY 169               | 0.2                      | STP<br>STP  | SIDEWALKS ALONG THE BRIDGE OVER SOUTHERN RAILROAD IN NICHOLASVILLE  KEENE RD - MAJOR WIDENING FROM US 27 (NICHOLASVILLE BYPASS) TO 0.5 W OF US 27 IN NICHOLASVILLE   | \$60<br>\$2,000                            | м<br>м      |
|  |                                |                          |             | SIDEWALKS ALONG THE BRIDGE OVER SOUTHERN RAILROAD IN NICHOLASVILLE KEENE RD - MAJOR WIDENING FROM US 27 (NICHOLASVILLE BYPASS) TO 0.5 W OF US 27 IN NICHOLASVILLE KEENE RD - MAJOR WIDENING  |  |             |
| 116 JESSAMINE  | KY 169                         | 0.5                      | STP         | SIDEWALKS ALONG THE BRIDGE OVER SOUTHERN RAILROAD IN NICHOLASVILLE  KEENE RD - MAJOR WIDENING FROM US 27 (NICHOLASVILLE BYPASS) TO 0.5 W OF US 27 IN NICHOLASVILLE KEENE RD - MAJOR WIDENING FROM US 68 TO 0.5 MI W OF US  | \$2,000                                    | М           |
|  |                                |                          |             | SIDEWALKS ALONG THE BRIDGE OVER SOUTHERN RAILROAD IN NICHOLASVILLE KEENE RD - MAJOR WIDENING FROM US 27 (NICHOLASVILLE BYPASS) TO 0.5 W OF US 27 IN NICHOLASVILLE KEENE RD - MAJOR WIDENING  |  |             |
| 116 JESSAMINE  | KY 169                         | 0.5                      | STP         | SIDEWALKS ALONG THE BRIDGE OVER SOUTHERN RAILROAD IN NICHOLASVILLE  KEENE RD - MAJOR WIDENING FROM US 27 (NICHOLASVILLE BYPASS) TO 0.5 W OF US 27 IN NICHOLASVILLE KEENE RD - MAJOR WIDENING FROM US 68 TO 0.5 MI W OF US  | \$2,000                                    | М           |
| 116 JESSAMINE  117 JESSAMINE                               | KY 169<br>KY 169               | 0.5                      | STP         | SIDEWALKS ALONG THE BRIDGE OVER SOUTHERN RAILROAD IN NICHOLASVILLE  KEENE RD - MAJOR WIDENING FROM US 27 (NICHOLASVILLE BYPASS) TO 0.5 W OF US 27 IN NICHOLASVILLE  KEENE RD - MAJOR WIDENING FROM US 68 TO 0.5 MI W OF US 27 AT NICHOLASVILLE  RECONSTRUCTION FROM US   | \$2,000<br>\$11,500                        | М           |
| 116 JESSAMINE  | KY 169                         | 0.5                      | STP         | SIDEWALKS ALONG THE BRIDGE OVER SOUTHERN RAILROAD IN NICHOLASVILLE  KEENE RD - MAJOR WIDENING FROM US 27 (NICHOLASVILLE BYPASS) TO 0.5 W OF US 27 IN NICHOLASVILLE  KEENE RD - MAJOR WIDENING FROM US 68 TO 0.5 MI W OF US 27 AT NICHOLASVILLE  RECONSTRUCTION FROM US 68 TO KY 33 IN WOODFORD CO.   | \$2,000                                    | M<br>M      |
| 116 JESSAMINE  117 JESSAMINE                               | KY 169<br>KY 169               | 0.5                      | STP         | SIDEWALKS ALONG THE BRIDGE OVER SOUTHERN RAILROAD IN NICHOLASVILLE  KEENE RD - MAJOR WIDENING FROM US 27 (NICHOLASVILLE BYPASS) TO 0.5 W OF US 27 IN NICHOLASVILLE  KEENE RD - MAJOR WIDENING FROM US 68 TO 0.5 MI W OF US 27 AT NICHOLASVILLE  RECONSTRUCTION FROM US 68 TO KY 33 IN WOODFORD CO. RECONSTRUCT CEMETARY  | \$2,000<br>\$11,500                        | M<br>M      |
| 116 JESSAMINE  117 JESSAMINE  118 JESSAMINE                | KY 169<br>KY 169<br>KY 169     | 0.5<br>1.8<br>9.1        | STP<br>STP  | SIDEWALKS ALONG THE BRIDGE OVER SOUTHERN RAILROAD IN NICHOLASVILLE  KEENE RD - MAJOR WIDENING FROM US 27 (NICHOLASVILLE BYPASS) TO 0.5 W OF US 27 IN NICHOLASVILLE  KEENE RD - MAJOR WIDENING FROM US 68 TO 0.5 MI W OF US 27 AT NICHOLASVILLE  RECONSTRUCTION FROM US 68 TO KY 33 IN WOODFORD CO. RECONSTRUCT CEMETARY HILL AND REMOVE OFFSET AT  | \$2,000<br>\$11,500<br>\$40,000            | M<br>M      |
| 116 JESSAMINE  117 JESSAMINE                               | KY 169<br>KY 169               | 0.5                      | STP         | SIDEWALKS ALONG THE BRIDGE OVER SOUTHERN RAILROAD IN NICHOLASVILLE  KEENE RD - MAJOR WIDENING FROM US 27 (NICHOLASVILLE BYPASS) TO 0.5 W OF US 27 IN NICHOLASVILLE  KEENE RD - MAJOR WIDENING FROM US 68 TO 0.5 MI W OF US 27 AT NICHOLASVILLE  RECONSTRUCTION FROM US 68 TO KY 33 IN WOODFORD CO.  RECONSTRUCT CEMETARY HILL AND REMOVE OFFSET AT KY 1267 (NEW ALIGNMENT)   | \$2,000<br>\$11,500                        | M<br>M<br>L |
| 116 JESSAMINE  117 JESSAMINE  118 JESSAMINE                | KY 169<br>KY 169<br>KY 169     | 0.5<br>1.8<br>9.1        | STP<br>STP  | SIDEWALKS ALONG THE BRIDGE OVER SOUTHERN RAILROAD IN NICHOLASVILLE  KEENE RD - MAJOR WIDENING FROM US 27 (NICHOLASVILLE BYPASS) TO 0.5 W OF US 27 IN NICHOLASVILLE  KEENE RD - MAJOR WIDENING FROM US 68 TO 0.5 MI W OF US 27 AT NICHOLASVILLE  RECONSTRUCTION FROM US 68 TO KY 33 IN WOODFORD CO. RECONSTRUCT CEMETARY HILL AND REMOVE OFFSET AT KY 1267 (NEW ALIGNMENT)  KEENE-TROY RD -   | \$2,000<br>\$11,500<br>\$40,000            | M<br>M<br>L |
| 116 JESSAMINE  117 JESSAMINE  118 JESSAMINE                | KY 169<br>KY 169<br>KY 169     | 0.5<br>1.8<br>9.1        | STP<br>STP  | SIDEWALKS ALONG THE BRIDGE OVER SOUTHERN RAILROAD IN NICHOLASVILLE KEENE RD - MAJOR WIDENING FROM US 27 (NICHOLASVILLE BYPASS) TO 0.5 W OF US 27 IN NICHOLASVILLE KEENE RD - MAJOR WIDENING FROM US 68 TO 0.5 MI W OF US 27 AT NICHOLASVILLE RECONSTRUCTION FROM US 68 TO KY 33 IN WOODFORD CO. RECONSTRUCT CEMETARY HILL AND REMOVE OFFSET AT KY 1267 (NEW ALIGNMENT) KEENE-TROY RD - RECONSTRUCTION FROM   | \$2,000<br>\$11,500<br>\$40,000            | M<br>M<br>L |
| 116 JESSAMINE  117 JESSAMINE  118 JESSAMINE  119 JESSAMINE | KY 169  KY 169  KY 169         | 0.5<br>1.8<br>9.1<br>1.3 | STP STP STP | SIDEWALKS ALONG THE BRIDGE OVER SOUTHERN RAILROAD IN NICHOLASVILLE  KEENE RD - MAJOR WIDENING FROM US 27 (NICHOLASVILLE BYPASS) TO 0.5 W OF US 27 IN NICHOLASVILLE  KEENE RD - MAJOR WIDENING FROM US 68 TO 0.5 MI W OF US 27 AT NICHOLASVILLE  RECONSTRUCTION FROM US 68 TO KY 33 IN WOODFORD CO.  RECONSTRUCT CEMETARY HILL AND REMOVE OFFSET AT KY 1267 (NEW ALIGNMENT)  KEENE-TROY RD - RECONSTRUCTION FROM TROY NEAR WOODFORD C\L TO  | \$2,000<br>\$11,500<br>\$40,000<br>\$4,000 | M<br>M<br>L |
| 116 JESSAMINE  117 JESSAMINE  118 JESSAMINE                | KY 169<br>KY 169<br>KY 169     | 0.5<br>1.8<br>9.1        | STP<br>STP  | SIDEWALKS ALONG THE BRIDGE OVER SOUTHERN RAILROAD IN NICHOLASVILLE  KEENE RD - MAJOR WIDENING FROM US 27 (NICHOLASVILLE BYPASS) TO 0.5 W OF US 27 IN NICHOLASVILLE  KEENE RD - MAJOR WIDENING FROM US 68 TO 0.5 MI W OF US 27 AT NICHOLASVILLE  RECONSTRUCTION FROM US 68 TO KY 33 IN WOODFORD CO.  RECONSTRUCT CEMETARY HILL AND REMOVE OFFSET AT KY 1267 (NEW ALIGNMENT)  KEENE-TROY RD - RECONSTRUCTION FROM TROY NEAR WOODFORD C\L TO KY 1966 IN FAYETTE CO.                     | \$2,000<br>\$11,500<br>\$40,000            | M<br>M<br>L |
| 116 JESSAMINE  117 JESSAMINE  118 JESSAMINE  119 JESSAMINE | KY 169  KY 169  KY 169         | 0.5<br>1.8<br>9.1<br>1.3 | STP STP STP | SIDEWALKS ALONG THE BRIDGE OVER SOUTHERN RAILROAD IN NICHOLASVILLE  KEENE RD - MAJOR WIDENING FROM US 27 (NICHOLASVILLE BYPASS) TO 0.5 W OF US 27 IN NICHOLASVILLE  KEENE RD - MAJOR WIDENING FROM US 68 TO 0.5 MI W OF US 27 AT NICHOLASVILLE  RECONSTRUCTION FROM US 68 TO KY 33 IN WOODFORD CO.  RECONSTRUCT CEMETARY HILL AND REMOVE OFFSET AT KY 1267 (NEW ALIGNMENT)  KEENE-TROY RD - RECONSTRUCTION FROM TROY NEAR WOODFORD C\L TO KY 1966 IN FAYETTE CO. RECONSTRUCTION FROM | \$2,000<br>\$11,500<br>\$40,000<br>\$4,000 | M<br>M<br>L |
| 116 JESSAMINE  117 JESSAMINE  118 JESSAMINE  119 JESSAMINE | KY 169  KY 169  KY 169  KY 169 | 0.5<br>1.8<br>9.1<br>1.3 | STP STP STP | SIDEWALKS ALONG THE BRIDGE OVER SOUTHERN RAILROAD IN NICHOLASVILLE  KEENE RD - MAJOR WIDENING FROM US 27 (NICHOLASVILLE BYPASS) TO 0.5 W OF US 27 IN NICHOLASVILLE  KEENE RD - MAJOR WIDENING FROM US 68 TO 0.5 MI W OF US 27 AT NICHOLASVILLE  RECONSTRUCTION FROM US 68 TO KY 33 IN WOODFORD CO.  RECONSTRUCT CEMETARY HILL AND REMOVE OFFSET AT KY 1267 (NEW ALIGNMENT)  KEENE-TROY RD - RECONSTRUCTION FROM TROY NEAR WOODFORD C\L TO KY 1966 IN FAYETTE CO.                     | \$2,000<br>\$11,500<br>\$40,000<br>\$4,000 | M<br>M<br>L |

| 122 JESSAMINE KY 1268   1.2   STP   IN WILMORE TO US 86   S.4,000   L   |                    |          |     |       | DECONOTED ICTION FROM IOV 60 |                 |  |
|---|--------------------|----------|-----|-------|------------------------------|-----------------|--|
| 123 JESSAMINE KY 1980   3.2   NFA 68 TO US 27   S12,000   H   | 122 JESSAMINE      | KY 1268  | 1.2 | STP   |                              | \$4.000         | L  |
| 123 JESSAMINE KY 1980   3.2   NFA   68 TO US 27   \$12,000   H  | _                  |          |     |       |                              | , ,             |  |
| 124   |                    |          |     |       |                              |                 |  |
| REALIGNMENT TO REMOVE OFFSET INTERSECTIONS AT US  | 123 JESSAMINE      | KY 1980  | 3.2 | NFA   |                              | \$12,000        | H  |
| 124   |                    |          |     |       |                              |                 |  |
| 124 JESSAMINE KY 1980   |                    |          |     |       |                              |                 |  |
| ASHGROVE PIKE   RECONSTRUCTION FROM US   15,000   L   | 124 JESSAMINE      | KY 1980  | 1.0 | NFA   |                              | \$4,000         | М  |
| RECONSTRUCTION FROM US   27 TO KY 1974   \$15,000   L   | 121 02007 (1711112 | 1000     | 1.0 | 14171 |                              | Ψ1,000          |  |
| CAMP DANIEL BOOM RD   CAMP DANIEL BOOM RD |                    |          |     |       |                              |                 |  |
| RECONSTRUCTION FROM KY   1981   2.5   | 125 JESSAMINE      | KY 1980  | 4.3 | NFA   | 27 TO KY 1974                | \$15,000        | L  |
| 126   |                    |          |     |       | _                            |                 |  |
| HOOVER PIKE   |                    |          |     |       |                              |                 | _  |
| 127   | 126 JESSAMINE      | KY 1981  | 2.5 | NFA   |                              | \$6,500         | <u>L</u>                                     |
| 127   |                    |          |     |       |                              |                 |  |
| 128   JESSAMINE   KY 3375   2.7   NFA   68 TO SOUTHERN RR   S7,300   L  | 127 IESSAMINE      | KV 3374  | 17  | NΕΛ   |                              | \$7,000         | ı  |
| RECONSTRUCTION FROM US  | 121 JEGGAWIINE     | 111 0014 | 1.7 | 131 7 |                              | Ψ1,000          |  |
| 128 JESSAMINE   KY 3375   2.7   NFA 68 TO SOUTHERN RR   \$7,300   L   |                    |          |     |       |                              |                 |  |
| 129   | 128 JESSAMINE      | KY 3375  | 2.7 | NFA   |                              | \$7,300         | L  |
| 129   JESSAMINE   LOCAL   3.3   NFA   169 TO L LOGANNA RD   \$13,000   L  |                    |          |     |       | BETHANY RD -                 |                 |  |
| 130   |                    |          |     |       |                              | <b>.</b>        | _  |
| RECONSTRUCT INTERSECTION  | 129 JESSAMINE      | LOCAL    | 3.3 | NFA   |                              | \$13,000        | <u>      L                              </u> |
| AT TATES CREEK RD AND RAISE ABOVE 100 YEAR FLOOD LEVEL OF THE KENTUCKY   \$3,000 L  |                    |          |     |       |                              |                 |  |
| RAISE ABOVE 100 YEAR FLOOD   LEVEL OF THE KENTUCKY   \$3,000   L  |                    |          |     |       |                              |                 |  |
| 130   |                    |          |     |       |                              |                 |  |
| 130   |                    |          |     |       |                              |                 |  |
| RD) - RECONSTRUCTION FROM   BEECHWOOD DR TO KY 39 IN  | 130 JESSAMINE      | LOCAL    | 2.0 | NFA   |                              | \$3,000         | L  |
| 131   |                    |          |     |       | CHILDRENS HOME RD (MILES     |                 |  |
| 131   JESSAMINE   LOCAL   0.9   STP   NICHOLASVILLE   \$1,750   L   |                    |          |     |       |                              |                 |  |
| CLAYS MILL RD -   RECONSTRUCTION FROM KY   1980 TO MAN O WAR BLVD IN   132 JESSAMINE   LOCAL   1.4   STP   FAYETTE CO.   \$5,000   L  | 404 1500 444115    | 1.0041   | 0.0 | OTD   |                              | 04.750          |  |
| RECONSTRUCTION FROM KY  | 131 JESSAMINE      | LOCAL    | 0.9 | SIP   |                              | \$1,750         | L  |
| 1980 TO MAN O WAR BLVD IN   1980 TO MAN O WAR BLVD IN   132 JESSAMINE LOCAL   1.4 STP FAYETTE CO.   \$5,000 L   |                    |          |     |       |                              |                 |  |
| 132   JESSAMINE   LOCAL   1.4   STP   FAYETTE CO.   \$5,000   L   |                    |          |     |       |                              |                 |  |
| 133   JESSAMINE   LOCAL   0.6   NFA   ESTATES   S1,600   L  | 132 JESSAMINE      | LOCAL    | 1.4 | STP   |                              | \$5,000         | L  |
| 133   |                    |          |     |       |                              | . ,             |  |
| 134   JESSAMINE   LOCAL   1.4   NFA   1267 TO WOODS ROAD NO.1   \$3,500   L   |                    |          |     |       |                              |                 |  |
| 134   JESSAMINE   LOCAL   1.4   NFA   1267 TO WOODS ROAD NO.1   \$3,500   L   | 133 JESSAMINE      | LOCAL    | 0.6 | NFA   |                              | \$1,600         | L  |
| 134   |                    |          |     |       | _                            |                 |  |
| DELANEYS FERRY RD -   RECONSTRUCTION FROM   WOODS ROAD NO.1 TO KY 169   | 13/ IESSAMINE      |          | 1 / | NΕΛ   |                              | <b>¢</b> 3 500  |  |
| RECONSTRUCTION FROM   WOODS ROAD NO.1 TO KY 169   | 104 JESSAWIINE     | LOUAL    | 1.4 | INF#A |                              | φυ,υυυ          |  |
| 135   JESSAMINE   LOCAL   2.2   NFA   IN WOODFORD CO   \$5,500   L  |                    |          |     |       |                              |                 |  |
| 135 JESSAMINE   |                    |          |     |       |                              |                 |  |
| RECONSTRUCTION FROM  136 JESSAMINE LOCAL 3.6 NFA SULFUR WELL TO POLLARD RD \$18,000 L  GROGGINS FERRY RD - RECONSTRUCTION FROM  137 JESSAMINE LOCAL 1.7 NFA VINCE RD TO US 27 \$7,000 L  JAMES LANE\SINKING CREEK RD - RECONSTRUCTION FROM DELANEYS FERRY RD TO KY  | 135 JESSAMINE      | LOCAL    | 2.2 | NFA   |                              | <b>\$5,5</b> 00 | <u>L</u>                                     |
| 136 JESSAMINE LOCAL 3.6 NFA SULFUR WELL TO POLLARD RD \$18,000 L  GROGGINS FERRY RD - RECONSTRUCTION FROM  137 JESSAMINE LOCAL 1.7 NFA VINCE RD TO US 27 \$7,000 L  JAMES LANE\SINKING CREEK RD - RECONSTRUCTION FROM DELANEYS FERRY RD TO KY   |                    |          |     |       |                              |                 |  |
| GROGGINS FERRY RD - RECONSTRUCTION FROM  137 JESSAMINE LOCAL 1.7 NFA VINCE RD TO US 27 \$7,000 L  JAMES LANE\SINKING CREEK RD - RECONSTRUCTION FROM DELANEYS FERRY RD TO KY   |                    |          |     |       |                              | <b>.</b>        | _  |
| RECONSTRUCTION FROM  137 JESSAMINE LOCAL 1.7 NFA VINCE RD TO US 27 \$7,000 L  JAMES LANE\SINKING CREEK RD - RECONSTRUCTION FROM DELANEYS FERRY RD TO KY   | 136 JESSAMINE      | LOCAL    | 3.6 | NFA   |                              | \$18,000        | <u>      L                              </u> |
| 137 JESSAMINE LOCAL 1.7 NFA VINCE RD TO US 27 \$7,000 L  JAMES LANE\SINKING CREEK RD - RECONSTRUCTION FROM DELANEYS FERRY RD TO KY  |                    |          |     |       |                              |                 |  |
| JAMES LANE\SINKING CREEK RD - RECONSTRUCTION FROM DELANEYS FERRY RD TO KY   | 137 IESSAMINE      |          | 17  | NΕΛ   |                              | \$7 በበበ         | ı  |
| RD - RECONSTRUCTION FROM DELANEYS FERRY RD TO KY  | 107 JEGGAWIINE     | LOUAL    | 1.7 | 131 7 |                              | Ψ1,000          |  |
| DELANEYS FERRY RD TO KY   |                    |          |     |       |                              |                 |  |
| 138 JESSAMINE LOCAL 2.6 NFA 1966 IN FAYETTE CO \$6,000 L  |                    |          |     |       |                              |                 |  |
|   | 138 JESSAMINE      | LOCAL    | 2.6 | NFA   | 1966 IN FAYETTE CO           | \$6,000         | L  |

## **APPENDIX 4 – UNSCHEDULED NEEDS LISTS**

|     |                  |       |     |        | LOWDY LANEUW OO                 |          |   |
|-----|------------------|-------|-----|--------|---------------------------------|----------|---|
|     |                  |       |     |        | LOWRY LANE\KY 29                |          |   |
|     |                  |       |     |        | CONNECTOR - NEW                 |          |   |
|     |                  |       |     |        | CONNECTOR VIA LINLAW            |          |   |
|     |                  |       |     |        | (WESTERN BYPASS) FROM           |          |   |
|     |                  |       |     |        | LOWRY LN TO KY 1268 AND         |          |   |
| 400 | 1500444115       |       | 4.0 |        | FROM CORBITT DR TO KY 29 N      | ***      |   |
| 139 | JESSAMINE        | LOCAL | 1.0 | NFA    | OF WILMORE                      | \$2,000  | L |
|     |                  |       |     |        | MCCAULEY RD - REALIGN           |          |   |
|     |                  |       |     |        | REVERSE CURVES AT THE           |          | _ |
| 140 | JESSAMINE        | LOCAL | 0.8 | NFA    | WEST END OF MCCAULEY RD         | \$2,000  | L |
|     |                  |       |     |        | MARSHALL BRANCH RD -            |          |   |
|     |                  |       |     |        | EXTENSION TO KY 1980            |          | _ |
| 141 | JESSAMINE        | LOCAL | 0.6 | NFA    | (ASHGROVE PIKE)                 | \$2,000  | L |
|     |                  |       |     |        | <b>NEWMAN RD</b> - EXTENSION TO |          |   |
| 142 | <b>JESSAMINE</b> | LOCAL | 0.5 | NFA    | CAMP DANIEL BOONE RD            | \$2,000  | L |
|     |                  |       |     |        | RAINBOW DR - EXTENSION TO       |          |   |
|     |                  |       |     |        | CITY-COUNTY PARK AND            |          |   |
|     |                  |       |     |        | CONNECTION TO ENTRANCE          |          |   |
| 143 | <b>JESSAMINE</b> | LOCAL | 0.3 | NFA    | STRRET FROM BYPASS              | \$400    | L |
|     |                  |       |     |        | RICHARDSON LN -                 |          |   |
|     |                  |       |     |        | RECONSTRUCTION FROM             |          |   |
|     |                  |       |     |        | CLEAR CREEK RD TO               |          |   |
| 144 | <b>JESSAMINE</b> | LOCAL | 1.0 | NFA    | MCCAULEY RD                     | \$4,000  | L |
|     |                  |       |     |        | SUGAR CREEK RD -                |          |   |
|     |                  |       |     |        | RECONSTRUCTION FROM KY          |          |   |
| 145 | <b>JESSAMINE</b> | LOCAL | 3.2 | NFA    | 1268 TO THE KENTUCKY RIVER      | \$15,000 | L |
|     |                  |       |     |        | WEST LN - RECONSTRUCTION        | ·        |   |
|     |                  |       |     |        | FROM KY 1541 TO ELM FORK        |          |   |
| 146 | <b>JESSAMINE</b> | LOCAL | 2.2 | NFA    | RD                              | \$11,000 | L |
|     |                  |       |     |        | WOODS RD NO. 1 -                | . ,      |   |
|     |                  |       |     |        | RECONSTRUCTION FROM KY          |          |   |
| 147 | JESSAMINE        | LOCAL | 1.8 | NFA    | 169 TO DELANEYS FERRY RD        | \$6,000  | L |
|     | <del>-</del>     | -     |     |        | WOODS RD NO. 2 -                | . ,      |   |
|     |                  |       |     |        | RECONSTRUCTION FROM KY          |          |   |
|     |                  |       |     |        | 3433 TO US 27 NEAR              |          |   |
|     | JESSAMINE        | LOCAL | 1.3 | OTDINE | ANICHOLASVILLE                  | \$3,000  | L |

## UNSCHEDULED BICYCLE AND PEDESTRIAN TRANSPORTATION NEEDS

TO

## **Very High Priority**

STREET FROM
High and Euclid Intersection

Maxwell Street S Martin Luther King Blvd Kentucky Avenue
Richmond Road Shriners Lane French Quarter Square
Virginia Avenue Export Street South Broadway

## **High Priority**

Newtown Pike Extension

STREET FROM TO

Albany Road Jesselin Drive Tates Creek Road Alumni Drive **Edgewater Drive** Chinoe Road Bryan Avenue Loudon Avenue New Circle Road Chinoe / Greentree Road Armstrong Mill Richmond Road Cooper Drive South Limestone Chinoe Road Fontaine Drive Tates Creek Road Richmond Road High Street Woodland Avenue Rose Street

Leestown RoadGreendale RoadPrice DriveMt. Tabor RoadTodds RoadYellowstone Pkwy

Red Mile Road South Broadway Unity Drive Rose Street/Euclid Avenue Intersection

Rose Street/South Limestone Intersection
Rose Street Vine Street Euclid Avenue
Rosemont Garden Norfolk-Southern Railroad Clays Mill Road

S Martin Luther King Blvd Main Street Euclid Avenue
Tates Creek Road Montclair Drive New Circle Road
Town Branch Shared Use Path Downtown New Circle Road

UK Arboretum Connection
UK Arboretum Connection
University Drive
University Drive
Virginia Avenue

Bellefonte Drive
Alumni Drive
Hilltop Avenue
Virginia Avenue
Connect to main campus via KY Clinic

Waller Avenue South Broadway South Limestone

## **Medium Priority**

STREET FROM TO

Anniston/Eastland/Fortune Drive Liberty Road Bryan Station Road
Armstrong Mill Road Tates Creek Road Man o' War Blvd.
Coolavin Bike Route Jefferson Street Loudon Avenue
Forbes/Red Mile Road Leestown Road Red Mile Place

Forbes/Red Mile Road Leestown Road Red Mile Place
Georgian Way bike/ped overpass
Georgetown Road Newtown Pike Nandino Blvd.

Liberty Road Henry Clay Blvd. New Circle Road
Man O War Blvd Shared Use Path Sir Barton Way Versailles Rd
Mason Headley Road South Broadway Versailles Road
Midland Avenue Main Street Winchester Road
N Martin Luther King Blvd Sixth Street Main Street

Pimlico/Yellowstone/Centre Pkwy Alumni Drive Greentree Road Redding Road Tates Creek Road Lansdowne Drive Sixth Street Jefferson Street Bluegrass Park Drive Southland Drive Nicholasville Road Rosemont Garden Winchester Road Third Street Newtown Pike Man o' War Blvd. Trent Blvd. Appian Way

Wellington Way Fort Harrods Drive Clays Mill Road Wolf Run Shared Use Path Turfland Mall New Circle Road

## **APPENDIX 4 – UNSCHEDULED NEEDS LISTS**

## **Low Priority**

**STREET** 

East Main Street Eastin Drive Greendale Road Jefferson Street Lane Allen Road Lansdowne Drive Pasadena / Malabu Drive Richmond Road Versailles Road

Wilson Downing Road

Parkers Mill Road Wilson Downing Road Ark Royal Way Hanover Avenue Red Mile Road

Nicholasville Road

Midland Avenue

Old Paris Pike

Mercer Road

High Street

**FROM** 

то

Hanover Avenue Bryan Station Road Citation Blvd Sixth Street Clays Mill Road Montavesta Drive Lansdowne Drive Shriners Lane Newtown Pike Extension

## **APPENDIX 5**

## **PLAN RELATION TO TEA21 FACTORS**

|   | CH 1 | CH 2 | CH 3 | CH 4 | CH 5 | CH 6 |
|---|------|------|------|------|------|------|
| A. Support the economic vitality of the metropolitan area, especially |      |      |      |      |      |      |
| by enabling global competitiveness, productivity, and efficiency.     |      |      |      |      |      |      |
| B. Increase the safety and security of the transportation system      |      |      |      |      |      |      |
| for motorized and non-motorized users.                                |      |      |      |      |      |      |
| C. Increase the accessibility and mobility options                    |      |      |      |      |      |      |
| available to the people and for freight.                              |      |      |      |      |      |      |
| D. Protect and enhance the environment,                               |      |      |      |      |      |      |
| promote energy conservation, and improve quality of life.             |      |      |      |      |      |      |
| E. Enhance the integration and connectivity of the transportation     |      |      |      |      |      |      |
| system, across and between modes, for people and freight.             |      |      |      |      |      |      |
|   |      |      |      |      |      |      |
| F. Promote efficient system management and operation.                 |      |      |      |      |      |      |
|   |      |      |      |      |      |      |
| G. Emphasize the preservation of the existing transportation system.  |      |      |      |      |      |      |

## **APPENDIX 6**

## **GLOSSARY OF TERMS**

**ANNUAL AVERAGE DAILY TRAFFIC (AADT)** - The total yearly traffic volume divided by the number of days in one year.

ADA - Americans with Disabilities Act of 1990.

**BASE YEAR** -The year for which calibration data, such as Census data is available.

**CALIBRATE** - The procedure used to adjust travel demand forecasting models to simulate or duplicate actual or observed base year travel (or traffic volumes).

**CENSUS TRANSPORTATION PLANNING PACKAGE (CTPP)** - A special Census package of information aggregated for transportation planning purposes.

**CENTRAL BUSINESS DISTRICT (CBD)** - The business area or district located centrally (or downtown) in the urbanized area.

**CIRCULAR ROUTE** - A type of operation characterized by short distances and close headways that provide service within the CBD and close surrounding areas.

**CLEAN AIR ACT AMENDMENTS OF 1990** - Federal law establishing clean air standards and criteria for attaining those standards.

**CMS** - Congestion Management System - One of the seven management systems mandated in the Intermodal Surface Transportation Efficiency Act of 1991.

**CONGESTION** - The level at which transportation system performance is no longer acceptable to the general public due to traffic delay.

**EXPANSION AREA MASTER PLAN (EAMP)** - A plan for guiding development in the adopted "Expansion Area." The Expansion Area comprises approximately 5,330 acres of land immediately adjacent to the existing Urban Service Area. The Urban Service Area and Expansion Area together delineate the location of urban growth where planned development is encouraged. Urban-oriented activities are not permitted outside of these areas. See the <u>Expansion Area Master Plan</u> for detailed description.

**EXPRESS ROUTE** - A type of operation characterized by higher speed and fewer stops than generally exist on local transit lines, in order to traverse long distances as rapidly as possible.

**FHWA** - Federal Highway Administration

FTA - Federal Transit Administration.

**HEADWAY** - **difference in time or distance:** the interval or distance between two vehicles, trains, or ships traveling in the same direction along the same route.

**HOUSEHOLD** - An occupied housing unit.

**HOUSING UNIT** - A housing unit is a house, an apartment, a group of rooms or a single room, occupied as separate living quarters.

**INTERMODAL** - This refers to the inclusion of the various travel modes in the planning process.

**ISTEA** - Intermodal Surface Transportation Efficiency Act of 1991.

**KYDOT** - Kentucky Department of Transportation.

**KYTC** - The Kentucky Transportation Cabinet.

**LANE MILE** - One mile length of roadway one lane wide.

**LOCAL ROUTE** - A type of operation characterized by frequent stops and low speeds, the purpose of which is to deliver and pick up transit passengers as close to their destinations or origins as possible.

**MIS** - Major Impact Study - A study of all conceivable alternatives involving all modes of travel, the environment, social, cultural and economic factors.

**MOBILE 6** - Emissions analysis software for determining air quality conformity.

**MODE** - The modes of transportation include automobiles, transit, bicycles, pedestrian, rail, air and trucks.

**MPO** - Metropolitan Planning Organization - In this region, the MPO includes Fayette and Jessamine Counties.

**MSA** - Metropolitan Statistical Area - A Bureau of the Census term for a central city and surrounding areas. In Central Kentucky it includes Fayette, Scott, Bourbon, Clark, Madison, Jessamine, and Woodford Counties.

**NETWORK** - An abstraction of the physical road system in a format that a computer can process for travel demand modeling and forecasting.

**PARATRANSIT** – A form of transit serving persons with disabilities in which vehicles are dispatched on an as-needed basis instead of following a fixed route and schedule.

**PASSENGER MILES** - The number of passengers multiplied by trip length.

**PEAK HOUR TRAFFIC (PHT)** - The highest number of vehicles passing over a roadway segment during sixty (60) consecutive minutes.

**PERSON MILES TRAVELED (PMT)** - The number of miles traveled by each person on a trip. A 3-mile trip made by two people traveling together would be considered as 6 person miles.

**PERSON TRIP (PT)** - The one way movement of a person from origin to destination, regardless of whether the person is a driver or passenger. Two people traveling in one car are considered as 2 person trips.

**REVENUE SERVICE HOURS** - The time that a bus is in revenue operation.

**REVENUE SERVICE MILES** - Miles that a bus is in revenue operation.

**ROUTING** - The availability of transit to residents, employers, shoppers, or geographic coverage.

**SIP** - The State Implementation Plan to achieve air quality conformity with the Clean Air Act.

**SOCIOECONOMIC** - This term is used to describe information from which travel can be predicted. Social and economic factors include: income, households, number of automobiles available, travel mode usage, employment, age, etc.

**TEA21** - Transportation Equity Act for the 21st Century.

**TIP** - The Transportation Improvement Program – An annual document which lists all proposed transportation improvements within the MPO.

**TPC** - The Transportation Policy Committee - Policy and decision making body of the MPO.

**TRAFFIC ANALYSIS ZONES (TAZ)** - Geographic divisions of the transportation study area that attempt to bound homogeneous urban activities; that is, a zone may be residential, commercial, industrial, etc. These zones enable planners to link travel activities to physical locations in the study area.

**TRAVEL DEMAND FORECASTING** - The transportation planning process relies heavily on this process which involves predicting the impacts that various policies, projects, and programs will have on travel in the urban area.

**TRAVEL DEMAND MODEL** - A computer model made up of extensive travel information and travel equations. This transportation planning tool enables planners to predict travel on a simulated transportation system for a future year.

**TTCC,** The Transportation Technical Coordinating Committee - Comprised of people with transportation expertise from both government and private industry. It currently consists of representatives from Fayette County, Nicholasville, Jessamine County, the Kentucky Transportation Cabinet, KYDOT District 7, FHWA, and LexTran.

VMT - Vehicle miles of travel.

**V/C** - Ratio of traffic volume to capacity for a road facility.

**YEAR 2018 PLAN** - The previous Long Range Transportation Plan which was updated for the *Year 2025 Transportation Plan*.

Lexington Area Metropolitan Planning Organization

(ROPOLITAN.)

"Providing transportation planning for Fayette and Jessamine Counties"

Lexington-Fayette Urban County Government Center

200 East Main Street Lexington, KY 40507 Phone (859) 258-3160 Fax (859) 258-3163

# **LEXINGTON-AREA MPO Transportation Policy Committee August 25, 2004**

# Request for Amendment AMENDMENT # 1

Amends the following documents:

2025 Transportation Plan (LRTP)

2030 Transportation Plan (LRTP) Amendment &

FY 2005—FY 2008 Transportation Improvement Program (TIP)

The Lexington Area MPO, in coordination with the Kentucky Transportation Cabinet, is requesting to amend the 2025 Transportation Plan (LRTP), the 2030 Transportation Plan, and the Current FY 2005—FY 2008 Lexington Area MPO Transportation Improvement Program (T.I.P) be amended to add or change the following:

**TIP Amendment #1:** Preliminary Design and Environmental for the widening of New Circle Road: from Georgetown Road to Boardwalk Avenue, including the reconstruction of the Newtown Pike/New Circle Road Interchange – \$1,000,000 (State Project – SP).

**<u>Project Location</u>**: New Circle Road: from Georgetown Road to Boardwalk Avenue, including the reconstruction of the Newtown Pike/New Circle Road Interchange

**Project Scope:** Preliminary Design and Environmental

## **Tentative Project Schedule:**

- 1. Request for Qualifications for Consultant Design Service July 2004
- 2. Selection of Consultant August 2004
- Pre-Design Conference September 2004
- 4. Notice to Proceed November 2004
- 5. Preliminary Line and Grade April 2006
- Environmental October 2006

**Total TIP Amendment Project Cost**: Preliminary Design and Environmental = \$1,000,000 (State Project – SP).

**Purpose of Project:** Increase capacity and reduce congestion.

## Additional Notes related to the project:

The design/environmental schedule provided is an estimate and could be affected by a number of factors. The required coordination will be performed to minimize project impacts.

Lexington Area Metropolitan Planning Organization

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Lexington-Fayette Urban County Government Center

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**LEXINGTON-AREA MPO Transportation Policy Committee August 25, 2004** 

# Request for Amendment AMENDMENT # 2

Amends the following documents:

2025 Transportation Plan (LRTP)

2030 Transportation Plan (LRTP) Amendment &

FY 2005—FY 2008 Transportation Improvement Program (TIP)

The Lexington Area MPO, in coordination with the Kentucky Transportation Cabinet, is requesting to amend the 2025 Transportation Plan (LRTP), the 2030 Transportation Plan, and the Current FY 2005—FY 2008 Lexington Area MPO Transportation Improvement Program (T.I.P) be amended to add or change the following:

AMENDMENT #2 - LexTran #501 Comprehensive Planning Study

## **SCOPE OF WORK**

The following presents an outline of the work scope to develop and implement service improvements. An identification of the objectives of the work effort and specific activities to be undertaken are included in the following description.

#### Overview

The Lexington Transit Authority (LexTran) is Lexington's public transportation system, providing service to residents and visitors of the Greater Lexington region. The system operates service on weekdays, Saturdays and Sundays, and there are 12 routes. LexTran has a fleet of 48 buses. The system's paratransit service is operated by American Red Cross WHEELS.

The number of platform hours operated during weekdays is 455; during Saturday the Authority operates 311 platform hours and on Sunday, 311 platform hours. Weekday service operates from 6:00 am to 12:00 am; Saturday service operates from 6:00 am to 9:30 pm; and Sunday service from 6:00 am to 9:30 pm.

LexTran is currently undergoing major financial challenges, and it may be reducing service effective July, 2004 in order to reduce cost. In addition, the system may be placing a levy on the ballot as soon as November 2004 for a dedicated tax for transit.

There are many positive changes occurring at LexTran. Eighteen new buses were received already this year, and 8 more will be delivered in September of this year. Maintenance of the fleet has improved significantly, and service reliability has also improved.

A comprehensive analysis of LexTran's service has not been performed since '94. The Authority, therefore, is interested in having a comprehensive service analysis to review the current routes and schedules and to recommend ways of making the service more effective and efficient. The analysis should also provide alternative recommendations to LexTran should the Authority be successful in its tax levy campaign. Accurate passenger counts will be a critical part of the study, as the accuracy of current data is impacted due to inoperable fareboxes. The analysis should also provide a process for establishing performance standards for routes and making improvements.

LexTran recently formed a new Service Committee targeted to improving service. The committee is an effort to take an organized approach of gathering suggestions from riders and staff on improving transportation services. In addition, the LexTran Board has recently completed a strategic planning process.

In order to improve service, detailed information needs to be collected on the existing services. In
addition, more in depth analysis needs to be undertaken to develop the actual services, including
the specific revisions to existing routes as well as the operational details of any proposed new
services. It is recommended that these service revisions be implemented in a strategic
comprehensive manner. This would ensure that service is only changed once, thus minimizing the
impact to passengers and the system's operation. It will also allow policy makers to address
funding and service level issues simultaneously.

## **Objectives**

The requested objective of this effort includes:

- Compile detailed information on LexTran's fixed route services to provide a comprehensive understanding of the existing services, including ridership patterns, operating conditions, service performance.
- Review whether the routes and schedules are designed in the most efficient fashion.
- Provide information and a plan to elected officials and the public regarding the LexTran service design and dealing with the perception of empty buses and buses not going where people need them to
- Review passenger levels by time period, with an emphasis on late evening service.
- Relate service changes to current and potential funding levels.
- Review operations and schedules on routes operating to the transit center.
- Delineate potential service areas for new route design.
- Determine public perception and image through market research techniques, i.e. telephone survey.

## **Activities**

Specific requested activities to be undertaken for this effort are detailed below.

• Outline service priorities and adjustments based on phases in final recommendation report.

## **Task 1: Goals and Objectives**

Discussions should be held with LexTran representatives to establish the overall goals and objectives for the system. Financial objectives for the overall system and fixed route services, including the current local

funding levels and anticipated local funding levels, will need to be developed. Key areas to be served in the community and specific service objectives for the downtown transit center will need to be determined.

## **Task 2: Existing Service Review**

## Task 2.1 – Undertake Ridership Counts

A comprehensive ridecheck program should be undertaken to collect detailed ridership information on the system, individual routes and trips. Information should include boardings and alightings by stop and passenger loads. The information should be collected for all trips on a weekday, Saturday, and Sunday. Information should be tabulated and presented by route, route section and time of day.

## Task 2.2 – Collect Operating Data on Routes

Operating data for each route should be collected, detailing run time along the route and schedule adherence at key time points, including transfer connections and route ends. The information should be collected for all trips on a weekday, Saturday, and Sunday. Information should be tabulated and presented by route and time of day for weekdays and Saturdays.

## Task 2.3 – Undertake Transfer Analysis

Transfer activity between routes at the system's main transfer point, LexTran Transit Center, should be collected and tabulated. Information should be presented by time of day for a weekday.

## Task 2.4 – Calculate Performance Measures

Performance measures should be established for the overall system, individual routes, and route segments in the various time periods using ridership information, as well as revenue hour and financial data. Performance measures should include:

- **Service Effectiveness**: How productive the system or route is per unit of service, provided in passengers/revenue hour and passengers/revenue mile
- **Service Efficiency**: How costly a system or route is to operate, provided in cost per passenger trip carried.
- Farebox Return: Portion of the route operating costs that are covered by passenger fares.

## Task 2.5 – Undertake Data Analysis Activities

The information that is collected in the previous tasks would be reviewed and further data analysis activities conducted. This would include preparing tables and graphs summarizing key aspects of the collected data, including on-time performance, ridership by route and route segment by time period, and transfer patterns.

## Task 2.6 – Preparation of System and Route Profiles

The information should be summarized and presented for the overall system and individual routes. This information should focus on providing an overview of the system and each route: how service is operating, ridership patterns, service performance and key problem areas.

## Task 2.7 - Market Research

This information will be compiled so that LexTran understands current public perception and image within the community.

## **Task 3: Analysis of Data and Recommendations**

An approach should be proposed that incorporates the involvement of LexTran staff in the development of service recommendations. The approach should address:

- Use of the data and information collected in Task 2.
- Nature and extent of fieldwork.
- Process for developing recommendations.
- Documentation including technical memoranda and graphics.

## **Task 4: Financial Analysis**

A financial analysis should be included that translates the service plan options into a financial plan. This should relate to current and potential revenue levels at the local, state and federal levels.

## Task 5: Draft Report

A draft report should be produced for review by LexTran staff. If should incorporate the results of data collection and system analysis tasks, provide the details of the recommended service plan, and identifies the operating parameters and preliminary cost impacts. A total of – copies of the draft report, along with a CD containing an electronic copy, should be provided.

## **Task 6: Final Report**

A complete final report should be produced that incorporates comments from the review of the Draft Report. A total of – copies of the final report, along with a CD containing an electronic copy, should be provided.

# **Lexington Area Metropolitan Planning Organization**

pOLITAN.

"Providing transportation planning for Fayette and Jessamine Counties"

Lexington-Fayette Urban County Government Center

200 East Main Street Lexington, KY 40507 Phone (859) 258-3160 Fax (859) 258-3163

**LEXINGTON-AREA MPO Transportation Policy Committee August 25, 2004** 

# Request for Amendment AMENDMENT # 3

Amends the following documents:
2025 Transportation Plan (LRTP)
2030 Transportation Plan (LRTP) Amendment &
FY 2005—FY 2008 Transportation Improvement Program (TIP)

The Lexington Area MPO, in coordination with the Kentucky Transportation Cabinet, is requesting to amend the 2025 Transportation Plan (LRTP), the 2030 Transportation Plan, and the Current FY 2005—FY 2008 Lexington Area MPO Transportation Improvement Program (T.I.P) be amended to add or change the following:

TIP Amendment: No. #3 Central Kentucky Line Rail Service Preservation Project

**U.S. Congressional District No.(s):** 6

**U.S. Congressional District Member's Name(s):** Ben Chandler

**Project Title:** Central Kentucky Line Rail Service Preservation Project

**Purpose of Project:** Railway Preservation and Economic Development Enhancement

**Project Location:** Fayette County and Woodford County: The RJ Corman Railroad/Central Kentucky Line Rail Service is a 14-mile "short line" freight railroad serving customers and communities from Lexington, Kentucky to Versailles, Kentucky.

**Project Scope:** The STP funding will be transferred to the Federal Railroad Agency (FRA) and they will administer funding. The proposed work consists of the engineering and environmental phase, and Phase I Construction for providing structure reinforcement of two (2) existing wooden railroad bridges and to begin replacement of wooden railroad ties. The rail line provides transportation services to major Lexington-Versailles area employers and rail customers such as Quebecor World, Sylvania Products, Inc., and Pepsi Co. Inc. These customers, along with others, depend on the RJ Corman Railroad/Central Kentucky Line Rail Service to move approximately 200 carloads per month to and from their plants.

**Tentative Project Schedule:** Upon receiving the notification of available FY 2004 Discretionary STP funding, the engineering and environmental phase of the project will begin, and will take 8 to 12 weeks to complete. Upon completion of the engineering and environmental work, Phase I Construction work will begin for providing structure reinforcement of the two (2) wooden railroad bridges and replacement of

## **APPENDIX 7 – AMENDMENTS**

wooden railroad ties, as funding remains available. Future rehabilitation work will be contingent upon receiving additional discretionary funding.

<u>Total TIP Amendment Project Cost</u>: Preliminary Design and Environmental = \$500,000 (Federal Surface Transportation Program Discretionary Funds – STP FY 2004 Project Application).

**Lexington Area Metropolitan Planning Organization** 

20POLITAN.

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200 East Main Street Lexington, KY 40507 Phone (859) 258-3160 Fax (859) 258-3163

LEXINGTON-AREA MPO Transportation Policy Committee
August 25, 2004

# Request for Amendment AMENDMENT # 4

Amends the following documents:

2025 Transportation Plan (LRTP)

2030 Transportation Plan (LRTP) Amendment &
FY 2005—FY 2008 Transportation Improvement Program (TIP)

The Lexington Area MPO, in coordination with the Kentucky Transportation Cabinet and the University of Kentucky Transportation Center, is requesting to amend the 2025 Transportation Plan (LRTP), the 2030 Transportation Plan, and the Current FY 2005—FY 2008 Lexington Area MPO Transportation Improvement Program (T.I.P) be amended to add or change the following:

**TIP Amendment: #4—** ITS Project – \$1,000,000 (STP).

**Project Location:** Lexington Area MPO Urbanized Area, including the northern portion of Jessamine

County

**Project Scope:** Full scope will be provided

**Tentative Project Schedule:** 

**Total TIP Amendment Project Cost**: Preliminary = \$1,000,000

**Purpose of Project:** Improve overall traffic management and operations.

Additional Notes related to the project:

## **APPENDIX 8**

## AIR QUALITY COMPLIANCE LETTER



U.S. Department of Transportation

Federal Highway Administration Kentucky Division 330 W. Broadway Frankfort, KY 40601 Federal Transit Administration Region IV 61 Forsyth St., SW, Suite 17T50 Atlanta, GA 30303

September 17, 2004

Mr. Chris King, Director of Planning Lexington Area MPO 200 E. Main Street, 10<sup>th</sup> Floor Lexington, KY 40507

Dear Mr. King:

The Kentucky Division Office of the Federal Highway Administration (FHWA), and Region 4 of the Federal Transit Administration (FTA), in consultation with Region 4 of the United States Environmental Protection Agency (EPA), have reviewed the:

FY 2005 - FY 2008 Transportation Improvement Program (TIP) and 2030 Long Range Transportation Plan (LRTP) for the Lexington Area Metropolitan Planning Organization (LAMPO) (MPO resolution approval date of June 4, 2004)

The Kentucky Environmental and Public Protection Cabinet's Division for Air Quality, the Kentucky Transportation Cabinet's Division of Multimodal Programs, and the Lexington Transit Authority also had an opportunity to review and comment on the above-mentioned documents.

We found that these documents met the five primary criteria of the Transportation Conformity Rule (40 CFR part 93):

- use of the latest planning assumptions,
- · use of the latest emissions model,
- use of appropriate consultation procedures,
- consistency with the mobile source emission budgets in the State Implementation Plan (SIP), and
- · provisions for timely implementation of transportation control measures in the SIP.

Based upon the self-certification statement referenced in the TIP, regular participation on the MPO committees, and other knowledge of planning activities, we find the TIP and LRTP were developed using a continuing, comprehensive transportation process carried on cooperatively (3-C process) through the Lexington Area MPO, in accordance with the provisions of 23 U.S.C. 134 and section 8 of the Federal Transit Act (49 U.S.C. app. 1607).

Jose Sepulveda

Division Administrator

Federal Highway Administration

Hiram J. Walker

Regional Administrator

Federal Transit Administration